

OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro* GAMER



UNLEASHING NINJA GAIDEN

JOIN RYU HAYABUSA ON HIS DEBUT SIDE-SCROLLING ARCADE CLASSIC

ULTIMATE GUIDE: JUNGLE STRIKE

HOW TO DEPOSE EVIL WARLORDS WITH EASE IN EA'S EXPLOSIVE SEQUEL

AMSTRAD | COMMODORE | SEGA | ... | MOBILE



PlayStation Classic
OUR IN-DEPTH VERDICT ON SONY'S MINI CONSOLE



PLUS
MEGA MAN II
INTENSITY
COKTEL VISION
RAMPAGE
DIABLO III
POSTER PASTER
BUSHIDO
& MORE!

SONIC ADVENTURE

BLUFFER'S GUIDE
DETECTIVE GAMES
THE FULL GENRE CASEFILE OF ICONIC GUMSHOE GREATS

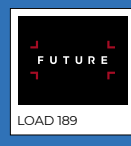
TAKASHI IIZUKA AND KAZUYUKI HOSHINO CELEBRATE THE DREAMCAST'S BESTSELLING GAME



25 YEARS OF THE ATARI JAGUAR
DEVELOPERS EXAMINE THE IMPACT OF ATARI'S CONSOLE SWAN SONG

SPACE STATION SILICON VALLEY
WE GO BEHIND THE SCENES OF DMA DESIGN'S UNIQUE PLATFORMER

IN THE CHAIR: PETER MCCONNELL
THE PIONEERING LUCASARTS MUSICIAN TALKS US THROUGH HIS CAREER



LOOKING FOR THE PERFECT
GIFT FOR A RETRO GAMER?



VISIT THE #1 RETRO GAMING
DESTINATION WORLDWIDE

funstock
RETRO.co.uk

THE RETROBATES

WHAT'S YOUR FAVOURITE DETECTIVE GAME?



DARRAN JONES

I've always been a big fan of *Contact Sam Cruise*. It does a fantastic job of making you feel like a gumshoe in the Thirties.

Expertise:

Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:

Dark Souls Remastered

Favourite game of all time:

Strider



DREW SLEEP

I love investigating a case in the *Phoenix Wright* games, and those clashes of wits in court are an amazing payoff.

Expertise:

Being Number One and sitting in the big chair while the captain is on an away mission.

Currently playing:

Yakuza Kiyami

Favourite game of all time:

Final Fantasy VIII



NICK THORPE

Does *Danganronpa* count?

Yes, let's say it does. I'll go with *Danganronpa 2: Goodbye Despair*, since that was the first one I played.

Expertise:

Owning five Master Systems (I sold two)

Currently playing:

Sonic Adventure

Favourite game of all time:

Sonic The Hedgehog



SAM RIBBITS

I have to say it's not a genre I'm particularly familiar with. Though *The Return Of The Obra Dinn* is on my radar to play.

Expertise:

The correct stylisation of *Pokémon: Let's Go, Pikachu!* & *Pokémon: Let's Go, Eevee!*

Currently playing:

Pokémon: Let's Go, Pikachu!

Favourite game of all time:

Croc: Legend Of The Gobbos



GRAEME MASON

Westwood's *Blade Runner*, a brilliant reimagining of one of my favourite movies of all time.

Expertise:

Adjusting the tape azimuth with a screwdriver

Currently playing:

Dear Esther

Favourite game of all time:

Resident Evil 4



DAVID CROOKES

As a fan of point-and-clicks, *Hotel Dusk: Room 215* arrested my attention and it made clever use of the Nintendo DS.

Expertise:

Amstrad, Lynx, adventures, Dizzy and PlayStation (but is it retro? Debate!)

Currently playing:

Resident Evil Director's Cut

Favourite game of all time:

Broken Sword



PAUL DRURY

Has to be *Heavy Rain*. I loved playing as PI Scott Shelby until the shocking revelation that [spoilers]...

Expertise:

Bridlington

Currently playing:

GRIP

Favourite game of all time:

Sheep in Space



MARTYN CARROLL

I'd go for the underrated *Contact Sam Cruise*. It was like a cross between *School Daze* and *The Big Sleep*.

Expertise:

Sinclair stuff

Currently playing:

Super Stardust Ultra

Favourite game of all time:

Jet Set Willy



LOADING

It's astonishing to think that *Sonic's* first 3D adventure took place two decades ago now. I can still remember the first time

I saw it running, too and the impression it left on me. I was visiting the VideoGame Centre and it was proudly showing off Sonic Team's game on its import Dreamcast.

The speed of the game took my breath away, and it was one of the first Dreamcast games that truly felt 'next-gen' to me. Sure, *Sonic's* adventure wasn't as polished as Mario's first 3D outing, but ultimately they're very different games and what *Sonic Adventure* did demonstrate was just how well the lovable blue blur translated across to the new perspective. Everything that made the original 2D games so much fun to play was present and correct, and its cleverly scripted stages meant that sections like the killer whale sequence always managed to blow you away.

I'm delighted, then, to reveal that our latest issue is not only dedicated to the Dreamcast's bestselling game, but features incredible insight from both Takashi Iizuka and Kazuyuki Hoshino, who had the unenviable task of creating a brand-new *Sonic* adventure for Sega's cutting-edge console and reigniting interest in what was seen at the time to be a flagging mascot. The end result became one of the system's best-loved games.

Enjoy the magazine!



CONTENTS

>> **Load 189** Breathing new life into classic games



RETRO RADAR

06 Sweet Symphony

Chris Abbott tells us about the excellent 8-bit-themed concert he has planned

08 The Vault

Essential items to spend your hard-earned Christmas cash on

10 Mr Biffo

This month our Teletext-infused columnist considers if he'll ever stop playing games

12 A Moment With...

The king of retro photography on his incredible new book

14 Back To The Noughties

Nick has touched down in January 2002. It's a brand new-year people!



REVIVALS

16 Mr Do!

Darran explains once and for all why Universal's game is better than *Dig Dug*

56 Rampage

Why you should cherish finding another gamer who owned Atari's Lynx

94 Adventure Game

Nick loves the obscure, so he was always going to enjoy this quirky Net Yaroze game



FEATURED

30 The Making Of: Intensity

Andrew Braybrook looks back at Graftgold's challenging C64 puzzler

34 Conversion Kings: Double Dragon 3: The Rosetta Stone

Shaun McClure on the challenges of converting the Technos brawler to the humble Spectrum in our brand new series

42 The Making Of: Poster Paster

The Taskset team discuss its bizarre C64 poster pasting simulator

44 From The Archives: Coktel Vision

We speak to the French developer about its popular edutainment and adventure games

48 The Making Of: Bushido

More Graftgold love, this time from Steve Turner about his samurai adventure game

66 Classic Moments: Bob's Bad Day

All of Nick's favourite bits from this impressive looking Psygnosis release

80 Future Classic: Diablo III

With a new Switch version out there's never been a better time to revisit Blizzard's hit role-playing sequel

82 The Making Of: Space Station Silicon Valley

We take a look behind the scenes of DMA Design's inventive N64 game

86 Arcade Perfect: Out Run

Arcade Club's deluxe *Out Run* cabinet is a thing of beauty

88 In The Chair: Peter McConnell

The cocreator of iMUSE and many a hit LucasArts soundtrack stops by for a chat



18

The Making Of: Sonic Adventure

Takashi Iizuka and Kazuyuki Hoshino on the trails and tribulations of making Sonic's first full-3D platformer



36

Ultimate Guide: Ninja Gaiden

Everything you need to know about Tecmo's challenging scrolling fighter



58



The Bluffer's Guide To Detective Games

68



The legacy of the Jaguar

74



Ultimate Guide: Jungle Strike
We reveal everything to be found in EA's popular sequel

50



Ultimate Guide: Mega Man II
We look at Capcom's phenomenal sequel, including its many inventive bosses and its Mega Drive port

REVIEWS

96 PlayStation Classic



98 Tetris Effect

98 Pokémon: Let's Go, Pikachu! & Eevee!

100 Spyro Reignited Trilogy

100 Heavy Burger

100 Toki

ESSENTIALS

102 Homebrew
Jason Kelk rummages through the latest games from hobbyist creators

106 How To
This month, Doctor Nick reveals how to stream old games

110 Mailbag
Write in to us and we'll reply! Using this new-fangled thing called 'mail'

113 Next Month
All the cool things to look forward to next issue of **Retro Gamer**

114 Endgame
Nick witnesses the double murder of a pair of siblings





SWEET SYMPHONY

Chris Abbott talks about the 8-Bit Symphony Concert

» Conductor Robin Tait, Andrew Penny of Hull Philharmonic Orchestra, Chris Abbott, Rob Hubbard, and Michelle Swithenbank (CEO and Principal, Hull College Group).

* CONTENTS

6 SWEET SYMPHONY

C64 Audio's Chris Abbott speaks about adapting 8-bit tunes for an orchestra

8 THE VAULT

A *Final Fantasy* book, Pac-Man lamps and a bookazine are vying for your cash

10 MR BIFFO

The lord of Digitiser stops for a second to think if he'll ever stop playing videogames

12 A MOMENT WITH

Evan Amos has photographed tons of consoles for public domain. We speak to him as he's about to launch his first book

14 BACK TO THE NOUGHTIES

Nick's time machine lands him in January of a brand-new year

On the 15 June 2019 Hull City Hall will play host to the Hull Symphony Orchestra, in association with Hull College, performing orchestral renditions of classic 8-bit music. C64Audio.com's Chris Abbott has long dreamed of this day, and tickets are now on sale.

The concert was originally a stretch goal of the Symphony 64 and Project Hubbard Kickstarters, are you glad to be going ahead?

Very glad. In the end, the reach of those Kickstarters wasn't big enough, but it was probably for the best, since it gave us extra time to prepare.



» Thing On A Spring takes time out from platforming to try its hand at some composing.

What is the significance of Hull as the venue?

Hull has a great orchestra! And a C64 pedigree as Rob Hubbard's birthplace. The concert is supported by Hull College as part of its role to champion the city's talent and showcase the opportunities for people interested in working in the city's growing digital sector.

I met the college's CEO, Michelle Swithenbank, after the college persuaded Rob to write the music for a mobile game they released to promote their digital courses. The idea for Hull as a venue for 8-bit Symphony snowballed from there. The concert was ready to be activated, and Hull College were looking to make a positive impact on the community and the city. And they did.

Have the original composers been involved in the process?

Rob Hubbard is the musical director. He's the QA for the scores, as well as an arranger. Mark Cooksey did a great arrangement of *Ghosts 'N Goblins*. Ben Daglish was involved with coarrangements. He was going to conduct, but sadly that's not to be.

Was it difficult selecting the final tracks?

There was so much potential material. The programme is a mixture of scores that were furthest along, scores to honour composers in attendance, and tributes to composers we've lost. Plus iconic tunes that C64 fans demand!

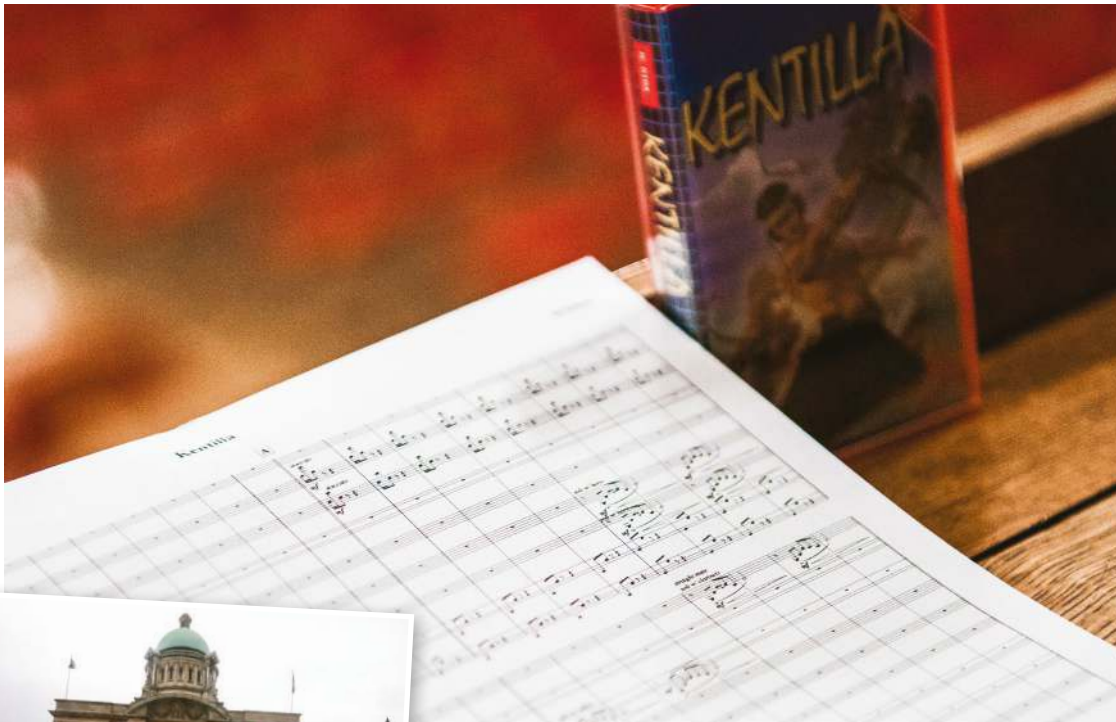
What has been the biggest challenge in taking three-channel SID music made for computers to the size of an orchestra?

It's all challenges! While it's possible to convert a SID to a MIDI file and then bring it into a score package and make it sound orchestral, making it interesting for the orchestra, tidy, and playable live is much tougher.

Chipmusic was often optimised for memory usage, which meant lots of repetition. That works great on the computer, but when you ask a human to play the same four notes over and over again for five minutes... that's not good. This is especially true for basslines.

Also, an orchestra can't play loud through the entire piece, and I'm not sure the audience would like them to. So there have to be loud bits, and

Photos © LA Production Studios



“The melody and harmony of the original SID is very firmly embedded in all of the orchestrations”

Chris Abbott



» Hull's City Hall, the venue for the 8-Bit Symphony concert.

quiet bits. When the original tune is unconcerned with loud/soft, that means more interpretation to be able to do that. And, some instruments can do things the SID couldn't hope to, so you need to make sure no instruments are being neglected.

Having said all that, the melody and harmony of the original SID is very firmly embedded in all of the orchestrations: and I would hope the soul is, too.

You have already announced many guests, including composer Peter Connelly and Jon Hare. Will there be a chance to meet and talk to the industry veterans?

I'm hoping to set up a signing table, though there are too many names to fit on it. What usually happens is that most of them gang together and go to a pub with the fans.

Ben Daglish, Richard Joseph and Anthony Lees are no longer with us. How will you be paying tribute to them?

Richard has *Barbarian II* (fused with *Parallax High Score*) and *Stiffliip & Co* in the concert, where his good friend

and former colleague Mark Knight will be doing a comic drunken cameo. Ben coarranged three tracks with me, but there's five of his, and half of the second part of the concert is devoted to his work. There will also be an 'in memoriam' section, we've lost too many people too young. This is why people should see their heroes when they have the chance.

Donations will be going to two charities, can you tell us more?

SpecialEffect does a great job of helping people with disabilities enjoy games. Macmillan Cancer Support will have a bucket there: it was Richard's chosen charity and does a great job making life with cancer more bearable.

Is there any concert-related merchandise for fans?

There will be a preorder shop opening in March. The main product (apart from the concert programme) will be the 8-Bit Symphony boxset: six albums (three main symphonic ones, and three bonus ones). The concert is basically a live performance of half of that. There will also be a scarf. Why should Chris



» Chris Abbott (left) watches Rob Hubbard sign a Commodore 64.

Huelsbeck have all the scarf-related kudos? Now [they] can be yours!

What makes this different to other video game concerts?

It's much more 8-bit. The gap between original source material and orchestration is much wider, and we have more to prove. On the other hand, we've got access to the best tunes of that age. The melodies in the source material are extraordinarily strong and memorable. Plus, we've got Rob Hubbard as musical director. Game, Set, and Match Day!

Tickets are on sale through www.8-bit-symphony.com *

ESSENTIAL TUNES



FORDIDDEN FOREST

Paul Norman was a musician before creating a series of hit games (including *Aztec Challenge*, whose theme has been arranged by *Tomb Raider* musician Peter Connelly for the concert.) Short jingles from *Forbidden Forest* and its gore-filled sequel become movements in a genuinely spooky piece.



MONTY ON THE RUN

Rob Hubbard's superb main theme was inspired by the *Devil's Gallop* (theme tune to radio drama *Dick Barton*). The orchestral version includes a cameo from Rob's *Commando* high score tune, part of a larger arrangement known as *Monty's Journey* for the second half.



FIRELORD

Hewson's medieval arcade adventure opened with a memorable Ben Daglish tune, filled with atmospheric flute. Remixer Glyn R Brown created an impressive orchestral remix in 2001 that served as the foundation for the concert arrangement, sounding even more dramatic with percussion and massed strings.



Pac-Man Lamp

The Pac-Man model of these lamps is available from Firebox with a Ghost version to be found at a number of other retailers. While the ghost understandably rotates through colours, Pac-Man himself is restricted to brightness settings and some fun sound effects. We have to say, we love the overall shape and accuracy of the Pac-Man lamp, though. It's very striking

Price: £29.99
From: firebox.co.uk



PICK OF THE MONTH

500 Years Later: An Oral History of Final Fantasy VII

500 Years Later is a very peculiar and possibly quite divisive approach to the form, but that's part of why we really like it. Chronicling the story behind the making of *Final Fantasy VII* with the developers who made it, this book has been the passion project of Matt Leone for around three years, gathering and translating the interviews. It's been made by Polygon in collaboration with Read-Only Memory, whose previous excellent book publishing work includes *The Bitmap Brothers: Universe* and *Sega Mega Drive/Genesis: Collected Works*.

500 Years Later plays with the format well with some wonderful portraits and illustrations of the key figures and events in the making of *FFVII* and even some fun twists. A code-breaking key in the book helps you unlock a secret Easter egg in the margins of the pages, for instance. With its mixture of large font on some pages, neon pink on others, it's a strange format, but one that keeps surprising and the access is second to none.

Price: £30 **From:** readonllymemory.vg



The Game Console

A new book by Evan Amos that breaks down every console from the earliest years of videogaming to the modern era, many of the machines in this book have been deconstructed for blow-up photos that give you a fantastic look into their inner workings. It's fascinating to see how the insides of consoles have evolved, as well as the massive leap in complexity for controllers in the last 40 years.

Price: £19.99
From: amazon.co.uk



SNK 40th Anniversary Collection Limited Edition

As you know from our review last issue, we really appreciated the effort SNK put into this excellent collection of games. The museum content, the selection of games and the fact that more games will be added for free makes this an excellent package. What this Limited Edition gives you is an additional art book and art cards and a soundtrack CD. Not mind-blowing additions, but welcome.

Price: £59.99
From: store.nisaeurope.com



100 Games to Play Before You Die

A brand-new collection from ourselves is now available chronicling your 100 games to play before you die alongside in-depth features into some of the greatest games ever made. If you're looking for a book to get you started in the world of retro gaming, or you enjoyed this month's *Mega Man II* article, then look no further than this excellent release.

Price: £15.99
From: myfavouritemagazines.co.uk

INSERT COIN[®]

www.insertcoinclothing.com



20% OFF

USE CODE: RETROGAMER20

Code valid until 31/12/2018 and cannot be combined with any other offer or discount. Valid online only and cannot be redeemed on vouchers, bundles or charity items. All codes are one use only.

Who is Paul Rose?

Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitizer The Show* at www.bit.ly/biffo2000.

Will it ever end?

I'm lucky enough to have reached my late-forties and still have both my parents around.

I know it isn't going to last forever, and I know that at some point in the not-too-distant it'll be my turn to become part of the older generation in the family.

Thing is, I still play games as much as I ever did. Well, alright – maybe not quite as much. I have less free time than I did when I was 14, when tidying my bedroom and doing homework felt more like optional sidequests than part of the main storyline. But I still love games as much as I ever did.

As time marches on, I have to wonder whether I'm going to reach a point where I just stop playing. I can't see any reason why I'd just stop, but at the same time I can't imagine myself in a care home playing *Red Dead Redemption XVI*. I mean, my dad still enjoys the same sorts of films and books he read growing up in an era before videogames were born, but even as my own youth disappears in the

rear view mirror of my life, videogames remain to me inextricably linked with being young.

My parents were always baffled by games. My only real memories of my mother playing anything were the handful of times I'd invite her to have a go on our Atari 2600. Watching her weaving from side-to-side while trying to play *Space Invaders* – somehow inventing motion controls years before they became an actual thing – is an image that is burned indelibly on my memories. She also had a brief, obsessive, flirtation with *Tetris* on the Game Boy (and, later, *Candy Crush Saga* – her entire relationship with it playing out on Facebook like the serialised chapters of an undiscovered Dostoevsky).

I once bought my dad a copy of some Napoleonic War strategy game, but as far as I know he never played even took it out of the packaging. I'd occasionally find him dabbling in *Minesweeper* or *Solitaire* on his PC, but outside of that, as far as I

know, the only time he's so much as touched a video game was the Christmas I bought a Wii U. I was quick to take the Wiimote from both him and mum after a game of bowling on *Wii Sports* erupted into the sort of domestic that only ever seems to happen at Christmas.

I think, more likely, as I continue to creep closer and closer towards old age, and the hairs on my head continue to desaturate, I'm going to look increasingly backwards.

It's what happens isn't it? It's why old people always talk about the days when they had more life ahead of them than they had at their back. It's why the games I play today are evenly split between modern games and the games of my more formative years. It's a cosy, comfortable, blanket over my knees as the nights draw in.

I can only see me pulling that blanket ever more tightly around my legs. ★



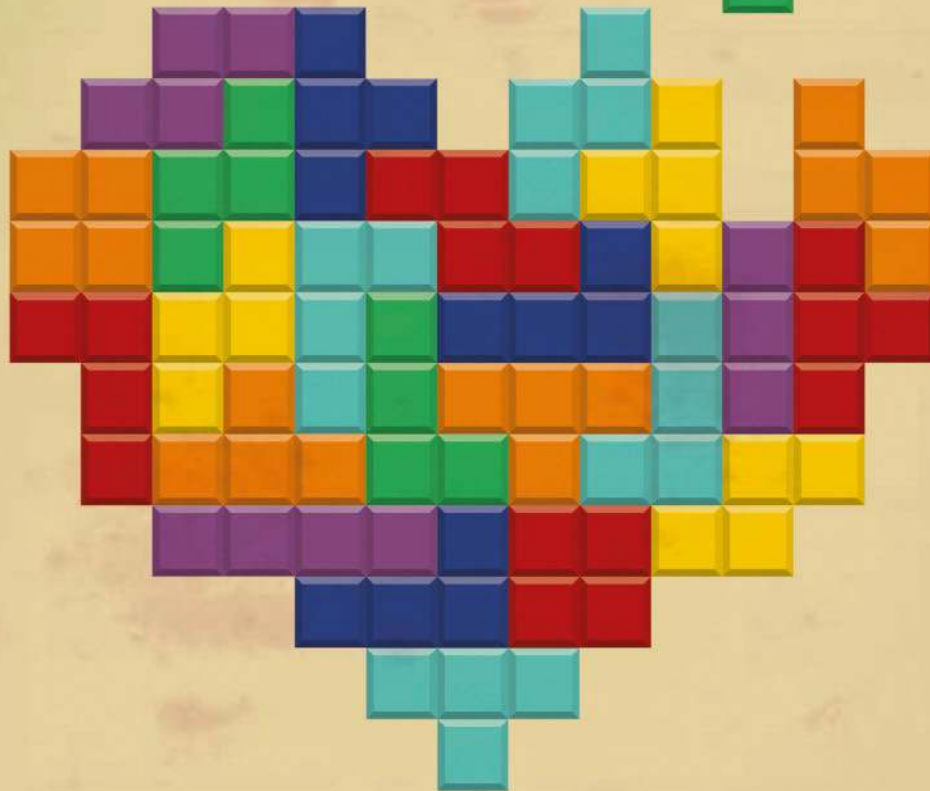
“My mother had a brief, obsessive, flirtation with Tetris on the Game Boy”

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK  @RetroGamer_Mag  darran.jones@futurenet.com 

THE NEW MARKETPLACE JUST FOR RETRO GAMES

WE



RETRO

BUY AND SELL retro games worldwide
MANAGE your game collection **FREE**
DISCOVER more than 100,000 retro games

retro+place.com



Picture Perfect

Having already created a huge repository of videogame hardware photography, Evan Amos is now releasing a book showcasing his work

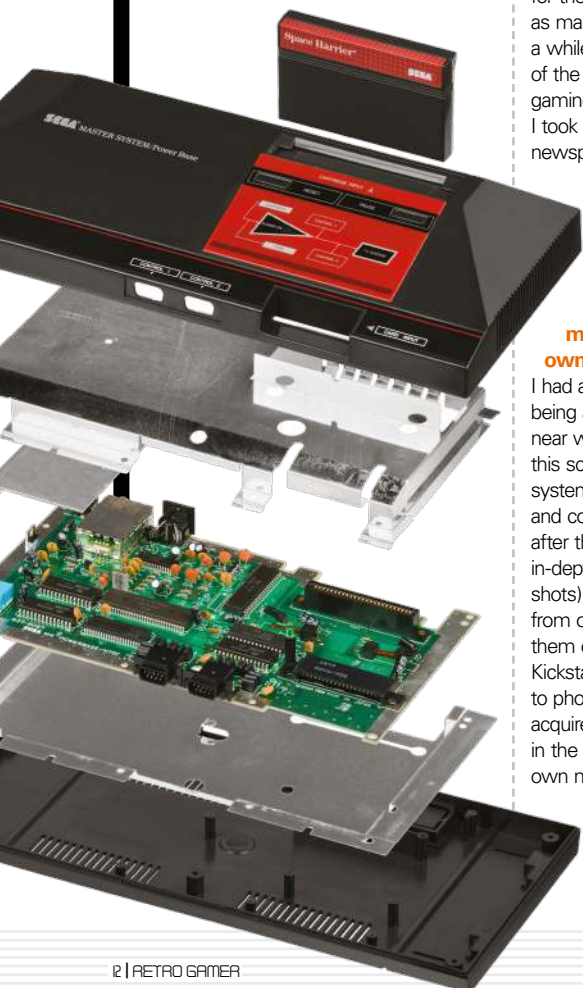
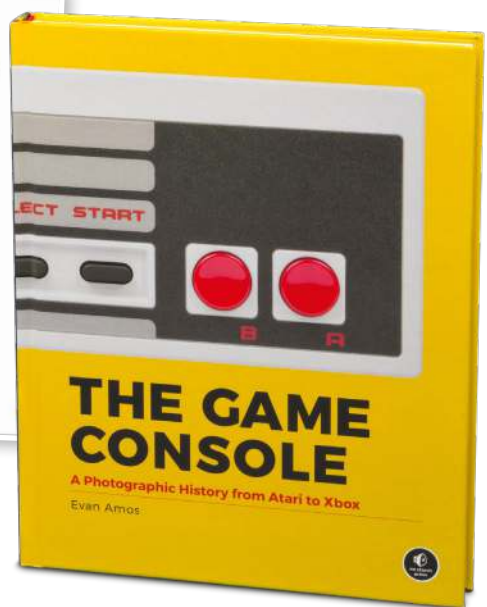
Evan is something of a gaming archivist, having photographed a huge array of classic and obscure gaming systems, and creating The Vanamo Online Game Museum. We caught up with him to talk about his brand-new book on retro hardware.

What's the first console/computer you ever owned and why?
My dad was into videogames, so when I was born in 1983, I came into a house that already had a ColecoVision in it. I supposedly played it, but my first real memory of playing videogames is when my dad bought my sister and I a NES for Christmas. I loved it, and haven't stopped playing videogames since then.

Why did you create The Vanamo Online Game Museum?
I had cameras and equipment from being into portrait photography, and on a lark I decided to fix up some Wikipedia videogame articles by adding good



Technophiles will definitely get a kick out of seeing each machine's guts. Some are surprisingly simple!



photos of consoles. Seeing how much it improved the Wikipedia articles, I quickly became obsessed with the idea of photographing every system and The Vanamo Online Game Museum was born from that. At first it was just for the personal goal of cleaning up as many pages as possible, but after a while I became much more aware of the impact the photos had on the gaming community as a whole. Photos I took were being used for magazines, newspapers, books and YouTube videos, so the project became more focused on preservation and treating these public domain photos as a historical archive.

How do you source the machines? Are they from your own personal collection?
I had a small collection of systems from being a lifelong gamer, but nowhere near what you'd need for a project of this scope. In the beginning, I borrowed systems from independent game stores and collectors to fill in those gaps, but after that, I really wanted to create more in-depth galleries of systems (internal shots), and you can only get that from owning the systems and having them on hand. To do that, I created a Kickstarter to raise funds to buy systems to photograph, and its success let me acquire a lot of consoles that ended up in the book. I've also spent a lot of my own money since then to purchase missing systems, and currently I have about 90 per cent or more of all the consoles released,

and I'm just missing very rare or variant systems.

Tell us about The Game Console, how did it start?
After my Kickstarter I was approached by No Starch Press about doing a book that featured my photos. [...] I see the book as an exhibit, where you'd walk up to a case and see the item with a little card telling you about it.

How long has it taken to create?
The book took over four years to make, mostly due to working on both the book and The Vanamo Online Game Museum single-handedly. The book also went through multiple iterations. I do think that the long development did help the book, though, because all of those iterations meant you could abandon things that don't work and build up things that do. Originally, I only had a few breakaparts in the book, but after realising just how cool they looked, I expanded the book to include 50 of them.

What sets it apart from other retro-themed books?
My book covers almost every system that's been released, and includes photos of very rare systems like the RDI Halcyon and the Atari 2700 prototype. Most of my favourite retro books only cover one system, or they feature an overview of more popular systems like the Atari 2600 and Intellivision, but not the APF MP1000 or RCA Studio II. Plus, the breakapart shots are unique and really fun to see.

Some of the photography is incredible and look like renders. How have you achieved this?
Almost everything was photographed in my little home photo studio, so I was able to keep the look of the photos pretty consistent. A lot of time physically and digitally cleaning systems, because I always try to make even old systems look brand new. Sometimes it was easy, but a few systems required a lot of retouching, like the rare prototypes that were borrowed from collectors.

How difficult was it to create the 'breakapart' images?
I did most of the breakapart images for the book in a short, intense period of time, so I developed a rhythm for it. First, you take the system apart and then separate all the individual pieces, then shoot the pieces one at a time where they should be if they were in the system. After shooting, you take all of those individual elements and combine them in Photoshop to make the breakapart. It's simple in theory, but getting the pieces positioned can be very tedious, especially when they don't stay in place. I had to make a lot of little stands and risers for some of the smaller or more awkward pieces. *

Visit www.nostarch.com/gameconsole for more information

WAR THUNDER



20.000.000+ PLAYERS



1000+ VEHICLES



REALISTIC DAMAGE MODELS

PLAY FOR FREE AT
WARHUNDER.COM

BACK TO THE NOUGHTIES

JANUARY 2002 – It's a new year, so it's time to focus on new consoles and mags – but not before we talk about MGS2, the most-hyped game of 2001. Join Nick Thorpe for a look at the start of the year the console wars reignited...



NEWS JANUARY 2002

On 1 January, the new Euro bank notes and coins became legal tender in Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. Though the currency had technically existed since 1999, this marked the major changeover to the new currency, and the end of the previous national currencies.

Teenager Charles J Bishop mimicked the September 2001 attack on the World Trade Center on 5 January, by stealing a single-engine Cessna 172 and flying it into the Bank Of America Tower in Tampa, Florida. In a letter left prior to his flight, Bishop claimed to be acting on behalf of Al Qaeda and in response to American abuses in Iraq and Palestine. However, authorities found no evidence of any contact with terrorist groups. Though offices suffered damage, the only injured party was Bishop himself, who died in the crash.

The term 'axis of evil' was coined by American president George W Bush in his state of the union address on 29 January, referring to states that harboured terrorists and sought to acquire weapons of mass destruction. The initial states named by Bush were Iran, Iraq and North Korea, though Undersecretary Of State John Bolton later added Cuba, Libya and Syria in a May 2002 speech.



THE LATEST NEWS FROM JANUARY 2002

The gaming press rang in the new year with cries of, "It's the second coming!" – for indeed, *Metal Gear Solid 2: Sons Of Liberty* had finally arrived in the form of a shiny PS2 disc. After what seemed like endless hype, the game arrived and it was best described as divisive. *Edge* awarded the game 8/10, asserting that "the level of detail that has gone into this is staggering", but noting that "ignoring most of the game's hints [...] and relying on your intelligence instead makes this a significantly better

game". It did also note that it "feels as though it would be much happier being a film", but praises it for including "some of the most convincing cinematic sequences seen in a videogame". Notably, *Edge's* review featured exclusively first-person shots and screenshots showing Solid Snake, never letting on that Raiden is in fact the main protagonist of the game. *GamesMaster* adopted a similar approach to spoilers on the first three pages of its review, before spilling the beans on the fourth. It lavished praise on the game, handing

out a whopping 96% score despite criticisms of control, the plot and the use of cutscenes – the last of which it bemoaned with the claim, "You spend as much time watching and waiting to do something in *MGS2* as playing it." Still, the mag claimed that it would be wrong to pick holes in a masterpiece, and that *MGS2* was "one of videogaming's greatest moments to date".

Play's impression, though certainly not negative, was not nearly as effusively positive. The magazine might not have gone so far as to declare the emperor to be shockingly nude, but it was definitely prepared to say that his clothing was not as seasonally appropriate as advertised. It also went straight in with the Raiden reveal, comparing it to "paying to see a *Bond* film before discovering that 007's only in it for the exciting intro". The magazine complained about sequences reprising the original *Metal Gear Solid*, feeling that they "ultimately serve to pad out genuinely inventive content in a rather obvious manner". The story



[PC] *Return To Castle Wolfenstein* was unapologetic about its old-school PC roots.



[PlayStation] *David Beckham Soccer* possessed none of the skill or flair of the man who endorsed it.

THIS MONTH IN...



Edge

"Some original games are fun, but *Edge* should stop looking to them as the solution," writes a brave anonymous reader. "They simply are not, as *Space Channel 5*, *Super Monkey Ball* and many others demonstrate, what gamers want. I want a good old FPS, but one with better execution." So that's who's been repeatedly buying *Call Of Duty*...



GamesMaster

Ahead of *Metal Gear Solid 2*, Zara Roach writes in to criticise Snake's flirtation techniques, asking, "Is Snake still going to come out with such sad chat-up lines?" The stealth expert is dismissed as a "cheesemeister" and apparently, "No self-respecting women would ever come up with or fall for lines like that." We actually know a couple...



XBM

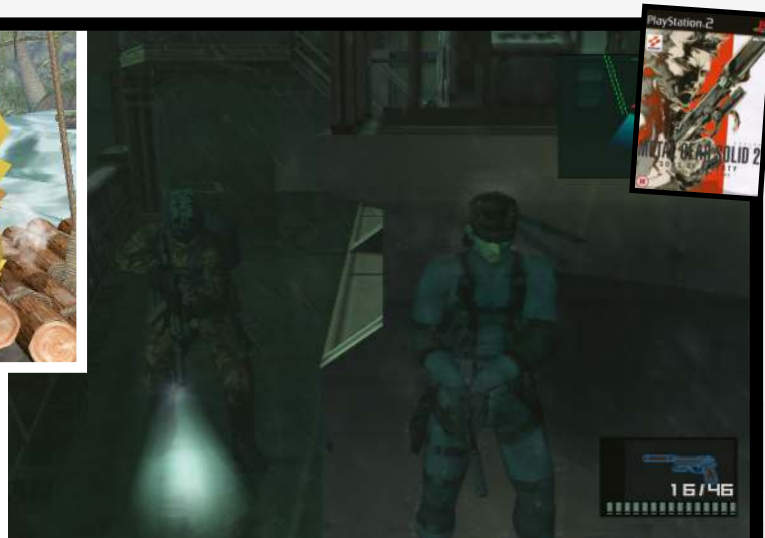
Keen to be down with the kids, the new Xbox magazine accepts letters via text message. Unfortunately, this means seeing things like, "HI I WUD JUST LIKE 2 KNOW IF PRE-ORDERING AN XBOX MEANS I WUD GET IT 4 CHRISTMAS OR WHEN IT IS LAUNCHED ON MARCH 14TH? THANX." Truly the pinnacle of discourse, that.



[GameCube] Who would have guessed that *Melee* would gain a competitive audience and remain popular in 2018?

was also criticised as being "woefully inept, consisting of such high-calibre nonsense that there's absolutely no point following it", and the reviewer asserted that "Kojima-san has not the slightest notion of how to deliver narrative in a manner appropriate to any medium known to man". Ultimately, the game was awarded 77% and described as "the *Metal Gear* for which Kojima bravely discarded the rulebook to create a game which is both simultaneously fantastic and absurd".

Major releases for the new consoles on the block dominated review sections elsewhere. The visually astonishing *Star Wars Rogue Squadron II: Rogue Leader* was awarded 87% in *GamesMaster*, with reviewer Geraint Evans praising the game's "gob-smacking beauty" but criticising it because "the gameplay is pretty much exactly like *Rogue Squadron*". *Edge* felt that the game possessed "first-rate graphics and superlative sound effects" but also "a handful of technical flaws and a number of sloppy game mechanics", and scored it 7/10. Also on the GameCube, *Super Smash Bros Melee* made its import debut. *GamesMaster* loved the party brawler and gave it 94%, asserting that the game's multiplayer appeal and plentiful options meant that it "won't have the stench of staleness until, ooh, at least 2008". That estimation seems rather conservative in hindsight.



[PS2] Evidence of Kojima's genius, or overhyped letdown? The press couldn't decide.

Edge wasn't so keen and gave it 6/10, describing the game as having "question marks over the subtlety of strategy", being "riddled with the problems of its predecessor" and being "ultimately monotonous".

Fans of the Xbox got their first great fighting game with the arrival of *Dead Or Alive 3*. *Edge* praised the game design, noting that it makes "graceful, balletic combat seem simultaneously so attainable yet so, so far away", and that, "Patience, control and observation are as crucial as timing and memory." Yet the reviewer awarded the game 7/10, due primarily to the scarcity of new content, noting that series veterans would be "contented rather than elated". *XBM* felt that it was the best fighting game on any machine and awarded it 8.6/10, with the reviewer particularly impressed by the "mind-blowing visuals". Readers were also reassured that they could "perv away at some of the largest virtual chest pillows you're likely to see this side of a *Tomb Raider* game", because apparently it's impossible to talk about *Dead Or Alive* without bringing that up.

Return To Castle Wolfenstein was the biggest PC game of the



[Xbox] We'd sympathise with Zack, who is about to get punched in the face, but he probably deserves it.

month, described by *GamesMaster* as "the digital Blitzkrieg we've all been waiting for" in a 94% review. Ever contrary, *Edge* gave it 6/10, feeling that "the game embodies the pure-PC shooter, acting as both its paragon and its scapegoat." Over on the old PlayStation, still chugging along despite its age, *David Beckham Soccer* couldn't break the dominance of *FIFA* and *Pro Evolution Soccer* - *GamesMaster* gave it a score of 61% and complained of visual ugliness and unimpressive AI.

Join us again next month as we look towards the local launch of the Xbox and that odd season where nothing's really coming out because all the publishers wanted to hit Christmas. It will be thrilling. ★

CHARTS

JANUARY 2002

PC

- 1 Championship Manager: Season 01/02 (Eidos)
- 2 Command & Conquer Red Alert 2: Yuri's Revenge (EA)
- 3 Commandos 2: Men Of Courage (Eidos)
- 4 Stronghold (Take Two)
- 5 Max Payne (Take Two)

PLAYSTATION 2

- 1 Pro Evolution Soccer (Konami)
- 2 Grand Theft Auto III (Take 2)
- 3 WWF Smackdown! Just Bring It (THQ)
- 4 Silent Hill 2 (Konami)
- 5 FIFA 2002 (EA)

MUSIC

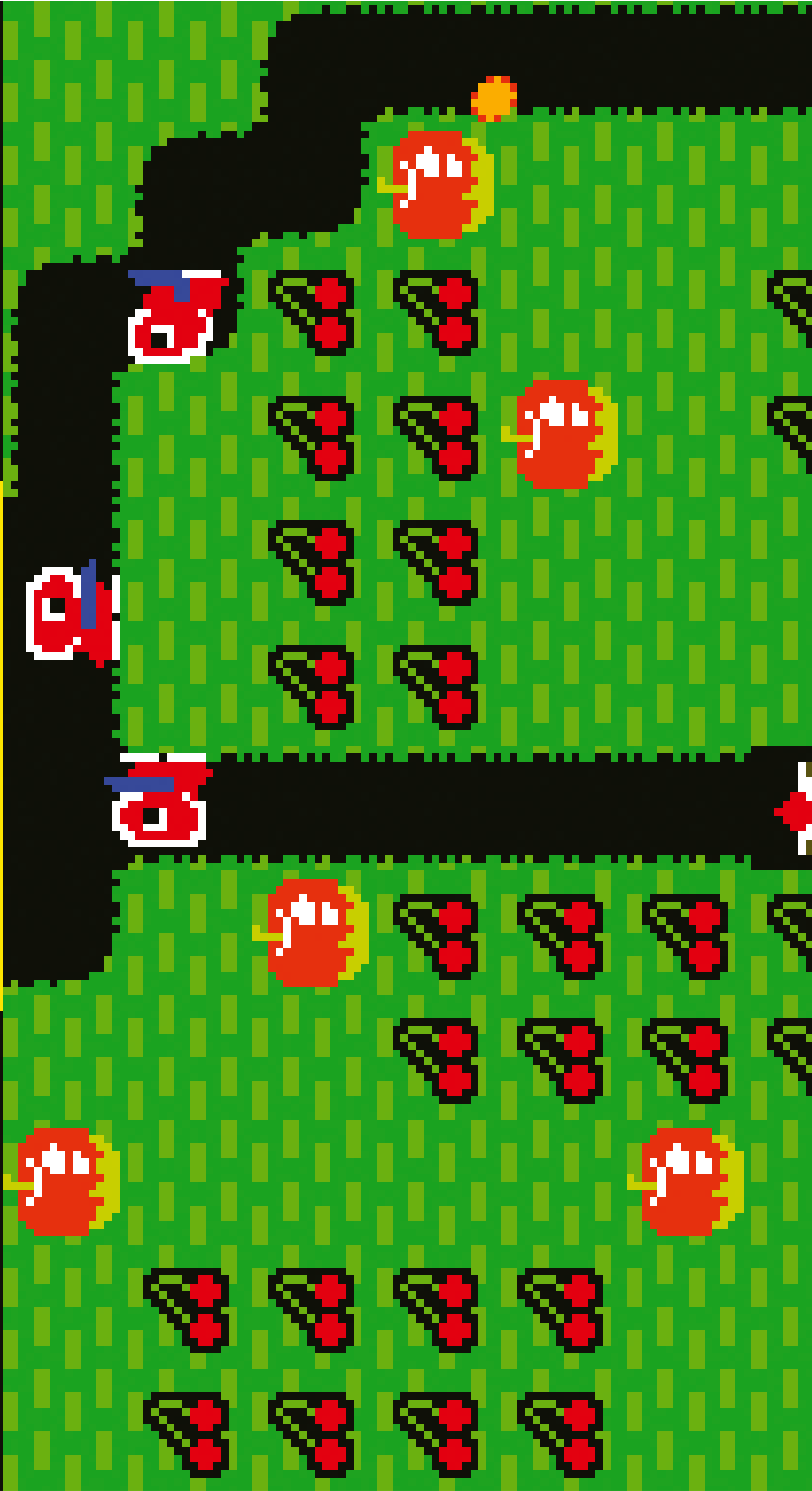
- 1 My Sweet Lord (George Harrison)
- 2 Get The Party Started (Pink)
- 3 AM To PM (Christina Milian)
- 4 Addicted To Bass (Puretone)
- 5 More Than A Woman (Aaliyah)

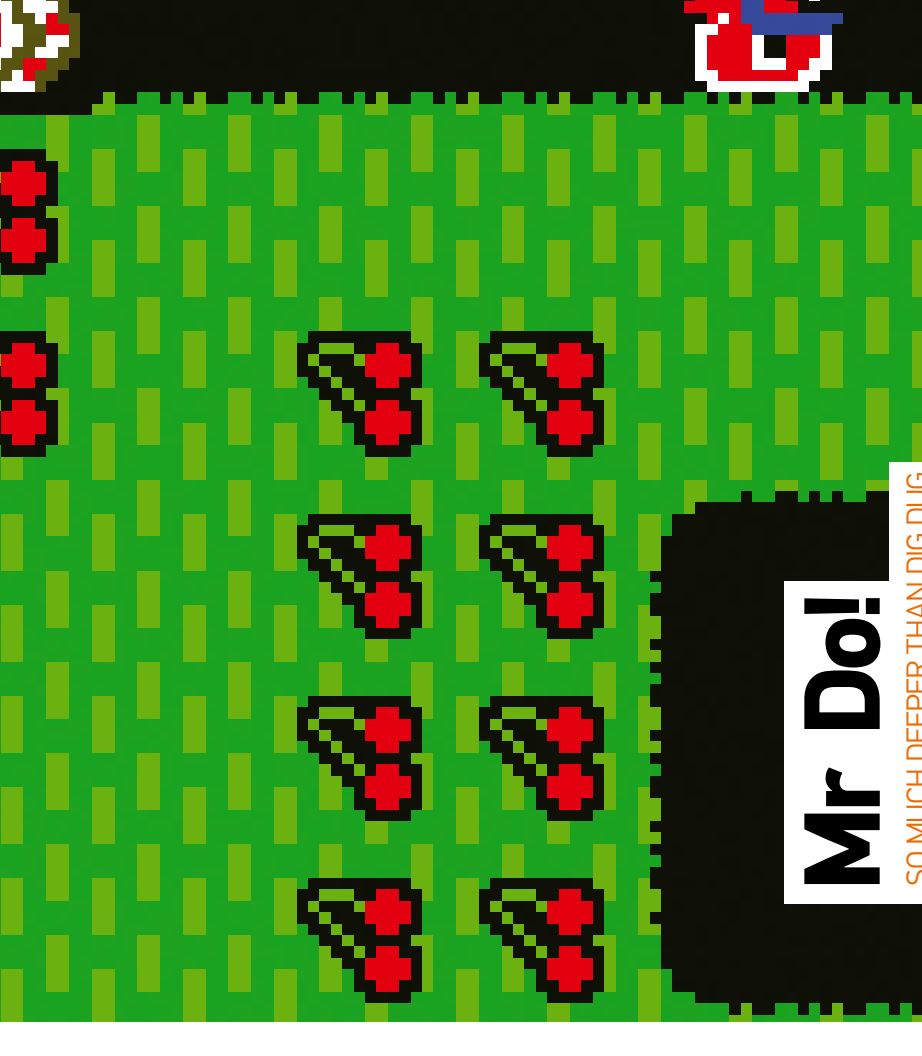
FILM

- 1 Vanilla Sky
- 2 The Lord Of The Rings: The Fellowship Of The Ring
- 3 Black Hawk Down
- 4 Rat Race
- 5 Harry Potter And The Philosopher's Stone

TEXT

1500





Mr Do!

SO MUCH DEEPER THAN DIG DUG



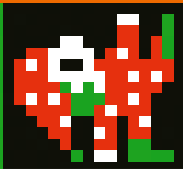
» ARCADE » 1982 » UNIVERSAL

People who work with me in the office know that I don't care much for *Dig Dug*. In fact, it's a running in-joke on the **Retro Gamer** team, and there will be regular mentions of it while I'm at work or on social media – and maybe the odd sneaking of Taizo Hori in places he shouldn't belong. The ribbing reached a high point when the team played *Dig Dug*'s walking music whenever I stepped away from my desk, and began leaving it playing as a hidden window on my computer so I couldn't turn it off easily.

Anyway, I've often said that I despise *Dig Dug*, but I don't, not really. In fact, I'd have no problem sticking it on **Retro Gamer**'s cover if we ever secured an interview with its creator. My real problems with *Dig Dug* come down to the fact that it's seemingly so well revered by gamers, when Universal's *Mr Do!* is clearly the better game. For me, the beauty of *Mr Do!* is the sheer versatility that it offers, something that *Dig Dug* doesn't quite achieve. Namco's game allows you to either pump enemies to death or crush them with rocks to clear a stage, but *Mr Do!* takes things further. Although it doesn't feature rocks, apples serve the same purpose in Universal's game. What's more it's possible to push them around, allowing for additional strategy as you set up perfect kill points to boost your score. Alternatively, you can use a power ball and fling it your foes – although it takes longer and longer to charge, leaving you defenceless in the meantime.

If enemy destruction isn't to your taste, you can simply clear a stage by collecting all the cherries, which are strategically placed around each level. You can also clear a stage by collecting the word 'EXTRA' as individual letters appear on screen... Add in all the subtle point-scoring techniques and *Mr Do!* proves itself to be very special indeed. It has an insane amount of diversity that blew me away when I first encountered it in arcades and still manages to impress me today. *Dig Dug*? Not so much. *

» RETROREVIEWAL



SCORE: 100000

TOP

THE MAKING OF

SONIC ADVENTURE



IF THE DREAMCAST WAS GOING TO SUCCEED IN ITS MAKE-OR-BREAK MISSION, IT NEEDED STAR POWER – IT NEEDED SONIC. BUT SONIC NEEDED A REVAMP. WE SPEAK TO **TAKASHI IIZUKA** AND **KAZUYUKI HOSHINO** TO LEARN HOW SEGA'S HERO WAS REINVENTED FOR HIS 3D DEBUT

Words by Nick Thorpe



TAKASHI IIZUKA
DIRECTOR



KAZUYUKI HOSHINO
ART DIRECTOR

The gaming audience can be a fickle one, and by the late Nineties Sega was certainly feeling the effects of having lost its affection. In the early part of the decade,

the company had experienced explosive growth thanks to the success of the Mega Drive, driven by its charismatic mascot Sonic The Hedgehog. Sega broke Nintendo's virtual monopoly on the console market and joined it as a leader, before the company crashed down to earth as the over-engineered and expensive Sega Saturn failed to replicate the success of its predecessor. Sonic had suffered in those years – Sonic Team was busy on new projects like *NIGHTS Into Dreams*, and Sega Technical Institute's planned 3D platform game *Sonic X-treme* was cancelled, having collapsed under the weight of its own ambition. By mid-1997 Sonic had essentially been shuffled into the background, with his most recent game being *Sonic Jam*, a compilation of his Mega Drive adventures. Though the collection was excellent, it was astonishing to see that just six years after his debut, Sonic was already retro.

That change in status was not lost on Sonic Team, which began work on a new *Sonic* project immediately after *Sonic Jam*'s completion. "As we focused our time



» [Dreamcast] Flying allows Tails to take shortcuts, keeping him one step ahead of whoever he's racing at the time.

making new games and not *Sonic* games, we saw *Sonic*'s popularity drop and felt like we let down all the fans that had supported *Sonic* from the beginning," remembers Takashi Iizuka, director of *Sonic Adventure* and current *Sonic* series producer. But *Sonic*'s declining popularity wasn't just down to the lack of new games. "My impression was that Sonic had lost that fresh, new image he had when the character debuted. Almost all of that was gone and the character felt very safe, boring and conservative," explains *Sonic Adventure* art director Kazuyuki Hoshino. In short, Sonic needed a reboot. "We all took it upon ourselves to make another *Sonic* game – the best *Sonic* game to date – something that the fans would feel was worth the wait," says Iizuka.

Sonic Team knew that a new *Sonic* game would have to be radically different to previous entries, as a 2D game like the Mega Drive classics just wouldn't cut it with the audience of the late Nineties. However, Iizuka had envisioned what a 3D *Sonic* game might look like as early as 1996, with a '*Sonic RPG*' proposal – little more than a one-page sketch showing how typical adventure game elements might work in a *Sonic* environment. Unfortunately, actually trying to implement this soon caused problems. "We made the first prototype for *Sonic Adventure* on the Saturn. However, when we set out to create a 3D world for Sonic to be able to run around in freely we hit a wall with what the Saturn was able to do," explains Iizuka. "That's when we heard of the new Dreamcast hardware that would excel in representing a 3D environment. The Sega Saturn ▶



» [Dreamcast] This whale chase setpiece is a highlight of the very first action stage.

ADVENTURING PARTY

Who's who in Sonic Adventure? Meet the cast here



SONIC THE HEDGEHOG

STAGE GOAL: REACH THE FINISH LINE

■ The blue blur is back with his trademark spindash, and he's got some new moves. He's got a homing attack to help target enemies in 3D space. With the Light Speed Shoes he gains the Light Dash – the ability to fly across any path of rings. The Ancient Light upgrades this to a Light Speed Attack, which takes out all nearby foes.

STAGE GOAL: FINISH THE STAGE BEFORE YOUR OPPONENT

■ Tails can still fly, which is useful for taking shortcuts. He's now got a tail whip attack that allows him to take out enemies, too. If he picks up the Jet Anklet he'll increase his flying speed, and the Rhythm Badge gives him the ability to perform continuous tail attacks.

TAILS MILES "TAILS" PROWER



KNUCKLES THE ECHIDNA

STAGE GOAL: FIND THREE EMERALD SHARDS

■ The rough-and-ready echidna retains his ability to glide and climb. Upgrading with the Shovel Claw allows him to dig into soft ground for buried treasures, and the Fighting Gloves allow him to perform the extravagantly named Maximum Heat Knuckles Attack.



» [Dreamcast] Amy can only temporarily disable Zero with attacks, so running away is the better strategy.

» [Dreamcast] Just as in the 2D Sonic games, getting hit results in a loss of rings, and getting hit with no rings will cost you a life.

"WE WERE CONSTANTLY TRYING TO IMAGINE WHAT THE FINAL SPEC FOR THE [DREAMCAST] MIGHT BE"

Takashi Iizuka

► was very good at utilising manipulated sprites to present a display that represented polygons, but the Dreamcast was a true 3D processing machine, so it was perfect for developing *Sonic Adventure*."

The timing of the new game with the new hardware project turned out to be fortuitous, as Sonic Team could shape the Dreamcast to match its needs. "To create a 3D stage where Sonic could run around at high speed, we needed a lot of internal memory on the hardware," says Iizuka. "Since the Dreamcast was still in the planning stages of development, we were able to spec out the design for Sonic and then were able to put in a request to the hardware team about the required memory we would need in the machine, which really helped us execute on the design of the game." Of course, working on incomplete hardware also has its disadvantages, as Iizuka reminds us. "We started developing the game when the hardware was only about 30 per cent complete, so we were constantly trying to imagine what the final spec for the machine might be as we were creating the content."

Indeed, even with the ability to request plenty of memory, technical constraints were a real issue when creating *Sonic Adventure's* stages. "Because the world you run through is a 3D world, all the stages had set heights and lengths. At the time, we all had Sonic's height marked down at one metre, but having Sonic that large and running that fast for a couple of minutes, one stage would have to be many kilometres long and the data required for a stage would get to very large sizes," explains Hoshino. "While it may seem obvious to state that we'd have to split up the levels into pieces that would fit the allotted memory size we had to work in, then read in the data for the next part of the stage on the fly and get rid of the parts of the stage that you passed by, a lot of that know-how and technique took a lot of time to research and figure out back in the day."

The art direction for the stages was easier to figure out. "As a Dreamcast launch title, we needed to be able to present the abilities of the machine in an appealing way to consumers. That was what our team was ordered to do. When we asked ourselves, 'What graphics give you the impression of being high-spec?' the answer we decided upon were graphics that were realistic," explains Hoshino. Although Sonic would still visit forests and coasts, he'd also run through cities and ruins, without the abstract representations of previous games.

The game called for such environments due to its story, which flashed between the present day and an ancient echidna tribe's past interactions with the water spirit Chaos. In order to enhance the game's realism, Sonic Team took an international trip. "Game



STAGE GOAL: EVADE ZERO AND FIND THE BALLOON TO ESCAPE

■ Amy relies on her hammer to bash enemies, and can use it to launch herself when running at her low top speed. She can also disguise herself with objects. The Warrior Feather gives her access to a spinning hammer attack, and the Long Hammer does what it says on the tin.

AMY

AMY ROSE



E-102

G A M M A

STAGE GOAL: DESTROY THE TARGET

■ E-102 is literally fuelled by destruction – he's always working against the clock, but can extend his time limit by destroying enemies. The more targets you take down at once, the greater the time extension. Grabbing the Jet Booster gives him the ability to hover after jumping, and the Laser Blaster widens his attack pattern.

STAGE GOAL: FISH FOR FROGGY

■ He's not fast or agile, but Big can still break down baddies with a swing of his fishing rod. Of course, he spends most of his time fishing. A variety of lure upgrades give him the ability to catch bigger fish, and the Power Rod increases his casting distance. The Life Belt enables him to float in water, though he can dive by pressing A.

BIG

THE CAT



IN THE KNOW

- » **PUBLISHER:** SEGA
- » **DEVELOPER:** SONIC TEAM
- » **RELEASED:** 1998
- » **PLATFORM:** DREAMCAST
- » **GENRE:** PLATFORM

development up until then was all done with artists drawing all the textures by hand, but when developing on the Dreamcast, we were able to take real-life photos and use them as textures", Iizuka continues. "Because this was possible, we planned to take a trip out to not only see ancient ruins that were a key story point to the title first-hand, but also use it as a trip where we could gather assets for the game. We went to the very famous ruins in Central and South America: Chichen Itza, San Gervasio, Tikal, Machu Picchu, the Nazca Lines, and more. We took photos of the walls and materials in the real ruins and used those real photos as the assets in the game."

Having figured out how to create a large and detailed world for Sonic to explore, a bigger problem remained. Sonic had never inhabited a full-3D world before, and working out the game design required to make that enjoyable was a challenge. "For 2D classic *Sonic* games, if you kept going right, you'd be able to clear the goal line. Because there was that defined direction inherent in the gameplay we were able





GET A-LIFE

How Sonic jumped on the virtual pet boom

One of the more popular diversions in *Sonic Adventure* is the ability to raise the small Chao creatures – a concept that actually has its roots in a previous *Sonic Team* title. “The Nightopians (A-Life system) in *NIGHTS* were put in to change the game in areas where there weren’t any obstacles. I think it was very successful in providing a fresh experience every time you play,” explains Iizuka. “I created the Chao Garden as a way of applying the A-Life idea to the *Sonic* universe, to make sure there was some motivation to repeated playing of the same stages. That’s why you get the small animals in the action stages, and that’s why the Chao can be raised and cared for.” The Chao can be found and raised in three Chao Gardens, each of which is connected to an Adventure Field. By bringing the small animals you find in regular stages to Chao, they’ll gain statistical boosts and change in appearance, often taking on the characteristics of the animals they meet.

Since the game arrived during the height of the Tamagotchi craze, it’s also possible to take your Chao out with you on the Dreamcast’s VMU, via the minigame Chao Adventure. This simple game allows your Chao to encounter Sonic and friends and get into fights. In the GameCube version, the Game Boy Advance is used to host the more involved Tiny Chao Garden. Once you’ve got a world-beating Chao, you can take it to the races in the main game and try to win some emblems.



» [Dreamcast] Wandering around a city environment and talking to humans was a pretty radical new direction for the *Sonic* series back in 1998.

► to create the high-speed progression,” says Iizuka. “Once we went to a 3D world where you could run in any direction, you ultimately were never sure of where to go. This sort of gameplay required a completely different type of level design. In the very beginning we were building out the model for the stage, playing, then throwing out to remake, replay and throw it all out again and again till we got it right.”

Solving the problem required the use of a tool that hadn’t been particularly prominent in 2D game design. “When we were right in all the trial and error for level design, I picked up on the role and functionality of the camera,” Iizuka recalls. “2D Sonic would always be moving to the right of the display, and in a similar way, if we had the camera showing the direction that 3D Sonic should be running towards (into the world) in front of you, I thought we should be able to make any sort of complex 3D stage that you could get to the end of by continually going ‘up’ on the controller (moving forward in the world). After thinking up this camera system, we tried it out on Speed Highway and found it was successful!” Where other 3D platform games always show a view from behind the character, *Sonic Adventure*’s camera system is more heavily directed by the game designers, corresponding more to the stage

progression than the player’s direction of travel. You’ll be pointed around bends as the camera turns to face your next destination, and the camera often pulls out for spectacular shots during loops or other obstacles.

Although the stages were primarily designed around Sonic’s need for expansive locations, the game features five other characters with their own styles of gameplay. “It took so much more time to create the 3D worlds for Sonic to run around in than we ever imagined. We felt it was a waste if Sonic just quickly ran through the levels that we spent so much time creating, so I thought of ways we could leverage our assets effectively, and from that was born the six playable characters each with their unique playstyle,” says Iizuka. “Now that we had unique characters, I figured they should each have their own stories to follow and goals to accomplish, then I thought it would be interesting if all the stories had some connection to each other, so we wrote a story and then told that story through the six perspectives of the unique characters.”

The first three characters were all familiar to Sonic fans. Tails’ gameplay typically adapted portions of Sonic’s stages into one-on-one races. Knuckles’ game was designed to contrast with Sonic’s. “Since the gameplay for Sonic was about running through the various set routes, I wanted to add gameplay elements where you could move around in any direction inside of the 3D space. Since Knuckles’ original bio had him as a treasure hunter, I instantly had the idea of making some treasure hunting gameplay in the 3D universe,” explains Iizuka. Amy Rose also became playable for the first time, with Iizuka choosing a less combat-oriented style despite her squeaky hammer weapon. “The other characters all engage in aggressive behaviour as the core ‘fun’ and emotional satisfaction in the game, so I wanted to include some gameplay that was more about the thrill of technical gameplay,” explains the designer. “Hiding out of sight from pursuers, having to run and hide after an enemy pops out of nowhere – I wanted this game to

“IT TOOK MORE TIME TO CREATE THE 3D WORLDS FOR SONIC TO RUN AROUND IN THAN WE EVER IMAGINED”

Takashi Iizuka

have thrills and tension that wouldn't exist if the playable character was Sonic.”

Two new characters were also added, including E-102 Gamma – the first playable character to explore Eggman's side. “The first thing I thought about for Gamma was gameplay. I wanted some type of satisfying gameplay that couldn't be done with Sonic – that was shooting. When thinking about what sort of character would shoot, having one of Eggman's robots be a playable character first came to mind,” says Iizuka. “Looking back, the story was very interesting because we were able to express the feelings of a robot following Eggman's orders, as well as showing the animals locked inside.” The most unusual inclusion was that of Big the Cat, who brought something truly unique. “We had high-speed action, treasure hunting, shooting – tons of content to really challenge the level designers and creators, so I wanted one of the games that was going to be something fun and completely different from the other types of gameplay being offered,” explains Iizuka. “That's when I thought, if we have water on the map we can present the player with a fishing game. I told the character designer I wanted a giant, relaxed character so the players wouldn't mistake the gameplay on the level as something intense.”

In order to provide hub worlds to join up those action stages, the team implemented Adventure Fields, which were a new concept in the *Sonic* series. These also provided locations for story events and boss fights. “*Sonic Adventure*, just as the title suggests, was a platform action game with the addition of adventure elements, and we wanted to deliver that feeling of experiencing an epic story and epic adventure,” Iizuka explains. “We implemented the Adventure Fields as somewhere you could ask locals about things, ▶

CONVERSION CAPERS

▶ The adventure continued after the Dreamcast – how did it progress?

GAMECUBE (2003)

■ *Sonic Adventure DX: Director's Cut* adds revamped character models, some bonus missions, the ability to play as Metal Sonic and 12 playable Game Gear games. The Chao system has also been upgraded in line with *Sonic Adventure 2*. However, it suffers a number of graphical downgrades – the lighting and many effects have been downgraded or removed, and texture quality is generally inferior. The game now targets 60fps but frequently struggles to maintain it. This also causes bugs with game logic, as the timing code for many objects wasn't adjusted.



PC (2004)

■ The original release of *Sonic Adventure* for PC was based on the GameCube version, and offers the best quality FMV of all releases as well as support for high-res displays. However, it suffers from texture downgrades and incorrectly handled lighting. Music doesn't loop as files use the WMA format, which also offers inferior compression, and some sounds also play too quietly. This version is popular with modders, who have managed to use the Dreamcast files to circumvent most of the downgrades, as well as adding widescreen support, bug fixes and more.

XBOX 360/PS3/PC (2010)

■ These console versions are both based on the PC version, and fix up its lighting and lack of mipmapping. The framerate is also stabilised due to the use of modern hardware. However, some sounds are too loud and the sound effects and voice clips also have quality issues. The Xbox 360 version is available as a standalone release or as part of the *Dreamcast Collection*, alongside *Crazy Taxi*, *Space Channel 5 Part 2* and *Sega Bass Fishing*. It also works with Xbox One. The PS3 version was only released digitally, and a Steam PC release followed in 2011.



▶ [Dreamcast] E-102 Gamma's lock-on shooting gameplay is highly explosive and often results in some quite spectacular scenes.



» [PC] This wobbly road is completely absent from the finished version, which more closely resembles a race track in the sky.



LOST VALLEY

What's the story behind Sonic Adventure's most famous deleted area?

For many years, it was known that the Windy Valley stage had undergone a pretty radical redesign late in its development, as early screenshots and footage showed something very different to the final game. The final stage is centred on a sequence in which Sonic is pulled into a tornado, and features a number of pathways where he's carried between platforms by the wind. Though the stage was broadly similar in theme and flow in its prototype incarnation, the layout and visual treatment are completely different – the original version had many blue elements, plus arches and columns suggesting an old civilisation.

What wasn't well known was how and why the stage received its redesign. As it turns out, Takashi Iizuka was the one behind the changes. "At the time I was the director on this title so there was never a plan for me to do level design,



» [PC] The prototype version of Windy Valley offers greater scope for exploration than the more linear finished stage.

but our schedule was running tight and we had no one available who could clean up the partially completed Windy Valley, so I stepped in and remade it from scratch," he replies when asked about the stage.

The models for the old version were eventually found in the *Sonic Adventure* Autodemo, a rolling demonstration disc intended for store displays, and fan ItsEasyActually has restored the stage using a mixture of the existing assets and recreated ones based on early screens and footage. It's easy to see why the changes were made – unlike the race track style of the final game's levels, the prototype Windy Valley is open and sprawling, and your destination is not as immediately clear as it is when playing the stages in the final game. Still, it remains a fascinating example of how the game's level design philosophy evolved during its development period.



» [PC] The scrapped level geometry was taken from the demo intact, and is rougher than anything found in the final game.



► gather power-up items, and create places to explore and get lost in. The Adventure Fields were there to draw the players deeper into the world." These power-up items were also a new concept, giving characters new attacking and movement options as the game progressed. "In the spirit of an action RPG, we wanted to make locations that could only be accessed after receiving some new power, or by making certain difficult areas passable with a new ability – that was the inspiration behind the power-up items," Iizuka continues. "I was probably inspired in some way through the *Legend Of Zelda* series that I loved so much."

The existing characters had been tricky to represent well in 3D. However, the feeling that *Sonic's* design was dated allowed the art team to give the entire cast a refresh. "*Space Invaders* and *Pac-Man* were becoming popular again as retro games and characters, and they were popping up in indie music and urban 'street' fashion, so they were very interesting and attractive," Hoshino recalls. "It made us jealous, and we wanted *Sonic* to also become popular with this edge of subculture, or at least have some cool T-shirts being made with Sonic on them. I was thinking that, and there were other designers that were thinking the same thing, so we all got together to try and find this new graphic style for *Sonic*." New illustrations were produced, with





» [Dreamcast] The twists and loops that made the original game famous returned, and were arguably even more exciting in 3D.

characters sporting longer limbs and twisted styles. "What it boiled down to be was a graphic style and pose that was more aware of the fashion trends. The artwork was a good fit for the club music I was really into at the time," says the art director.

These weren't the only adjustments made to characters, as Sonic Team decided to try to introduce common international naming – which controversially meant renaming major characters, including Dr Robotnik.

"In Japan, his name was always Dr Eggman, so as *Sonic* became more popular, we wanted to try and unify the names across regions," explains Iizuka. "The same actually applies to Miles 'Tails' Prower, who was known more commonly as 'Miles' in Japan – we changed it from the Japanese standard and started using 'Tails'."

Though the illustrations were 2D drawings, their new style helped when representing the characters in 3D. "The new Sonic design had longer arms and legs, but one could say the bigger solution to the problem was the ability to pose the character where everything looked good from a variety of angles," says Hoshino. This is a common issue when adapting character designs into full 3D. "Characters posing in 2D can be very easily faked to look cool, but there are a lot of instances where you try and represent the same pose with a 3D model and it really can't be reproduced," he

» [Dreamcast] Knuckles gained the ability to dig through the dirt for treasure – here, he's managed to unearth a single ring.



» [Dreamcast] It's possible to see some very nice views when Sonic gets some height using a spring or a trampoline.

» [Dreamcast] Despite Big's relatively low number of series appearances, he retains a cult fan following.



“CHARACTERS POSING IN 2D CAN BE VERY EASILY FAKED TO LOOK COOL”

Kazuyuki Hoshino

explains. "An example would be Sonic crossing his arms. That was so difficult."

Artistic design was also of key importance when creating the game's antagonist. The team wanted to create something that could only have been realised on the Dreamcast, and came up with a creature named Chaos, who appears as a boss throughout the game. "What I was most excited about was the ability to represent semi-transparencies in-game. On the previous generations of hardware, it was difficult to represent something beautiful, so all the semitransparent effects we made for *Burning Rangers* took a lot of time to implement. However, this new machine was able to easily implement and use these effects wherever you wanted them," explains Hoshino. "One of [the] key benchmarks for quality videogame graphics is the representation of water. No matter what hardware generation you are developing games on, we have been working on techniques for representing water, and are always looking at how other companies and other teams are representing water in the games they make. We thought Chaos, who is a strong, yet fluid and beautiful representation of water, would be a perfect symbol for the game on this new hardware."

For audio, the decision was made to include full voice acting for the first time, with Jun'ichi Kanemaru and Ryan Drummond chosen to voice Sonic himself. Musically, lead composer Jun Senoue decided to retain some of the classic *Sonic* sound while adding a harder edge. Jingles he'd composed for *Sonic 3*, including the act clear music returned, and a couple of his tracks from the Mega Drive version of *Sonic 3D* were repurposed for *Twinkle Park* and *Windy Valley*. However, the original tracks showcased Senoue's background as a guitarist with a new hard rock





» [Dreamcast] Not everyone was a fan of the inclusion of fishing in the game, especially as it can be quite tricky.

► sound, with character themes featuring vocals from Ted Poley (Danger Danger) and Tony Harnell (TNT). Hardline's Johnny Gioeli provided the vocals for the main theme, titled *Open Your Heart*, beginning a long partnership with Senoue – they continue to perform together as Crush 40 today.

Sonic Adventure was released in Japan on 23 December 1998, arriving within the first month of the hardware's release. But it wasn't quite the game that Sonic Team had wanted it to be. "*Sonic Adventure* was a launch title for the very first release of the Dreamcast hardware in Japan, so the schedule for the title was tight. Even though there were issues we wanted to fix with the game content and more polish we wanted to put into the title, but the position we were in made us give up on addressing everything we wanted to – we had to deliver the game on time," laments Iizuka. However, Sonic Team had the chance to improve the game post-launch, a rare opportunity in those days. "Shortly after, when we were creating the English version of the game, there was plenty of time before the release of the Dreamcast in the western market and we had a lot of staff who were eager to work. So we didn't just do a straight-up localisation of the title, we included a lot of improvements and polish to the game that wasn't in the original Japanese release." This version accompanied the American release of the console on 9 September 1999, and was rereleased in Japan as *Sonic Adventure International*.



» [Dreamcast] Later stages introduce trickier challenges – this stone snake must be ridden between switches, each raising the water level.

“I WAS SO NERVOUS I THOUGHT MY HEART WAS GOING TO BURST OUT OF MY CHEST”

Takashi Iizuka

Sonic Adventure drew critical acclaim from the press. *Arcade* praised the game for “performing graphical trickery at a level never before seen on a home console,” while *CVG* liked the fact that the six characters allowed you to enjoy the same stages in different ways. *Dreamcast Magazine* praised the action stages, noting that they “really can take your breath away,” and *Edge* also felt that “level design is strong, although the best moments [...] are left until later areas.” Some criticisms were offered – *Dreamcast Magazine* noted that “the 3D camera angle fails at times”. *Arcade* felt that “occasionally you feel like a passenger on a rollercoaster”, and *Dreamcast Magazine* described Big’s minigame as “slightly less exciting than looking at grass”. In summary, *Edge* noted that “Sega hasn’t made the mistake of attempting to turn *Sonic* into *Mario*, instead building on what made the previous *Sonic* titles a success, and in the process recreating the true feel of a classic 2D platform game in 3D for perhaps the first time.” Review scores include 90% from *Dreamcast Magazine*, 5/5 ratings from both *CVG* and *Arcade*, and 8/10 from *Edge*. While the Dreamcast was ultimately not a commercial success, *Sonic Adventure* definitely was – it was the format’s bestselling game, selling 2.5 million copies.

Such an important project is bound to have some sentimental value attached to it, and both Iizuka and Hoshino have fond memories of making *Sonic Adventure*. “For me, the location scouting trip to Central and South America is a very important experience. While the trip was extremely valuable to the development of the title, I was able to go to countries I wouldn’t easily be able to travel out to, and I was able to see just how people live in these countries,” says Hoshino. “I gained a lot of knowledge from that trip and



DEVELOPER HIGHLIGHTS

NIGHTS INTO DREAMS

SYSTEM: SATURN

YEAR: 1996

BURNING RANGERS

(PICTURED)

SYSTEM: SATURN

YEAR: 1998

PHANTASY STAR ONLINE

SYSTEM: DREAMCAST

YEAR: 2000

» [Dreamcast] *Casinopolis* is an interesting nonlinear stage in which your goal is to win 400 rings by playing pinball tables.

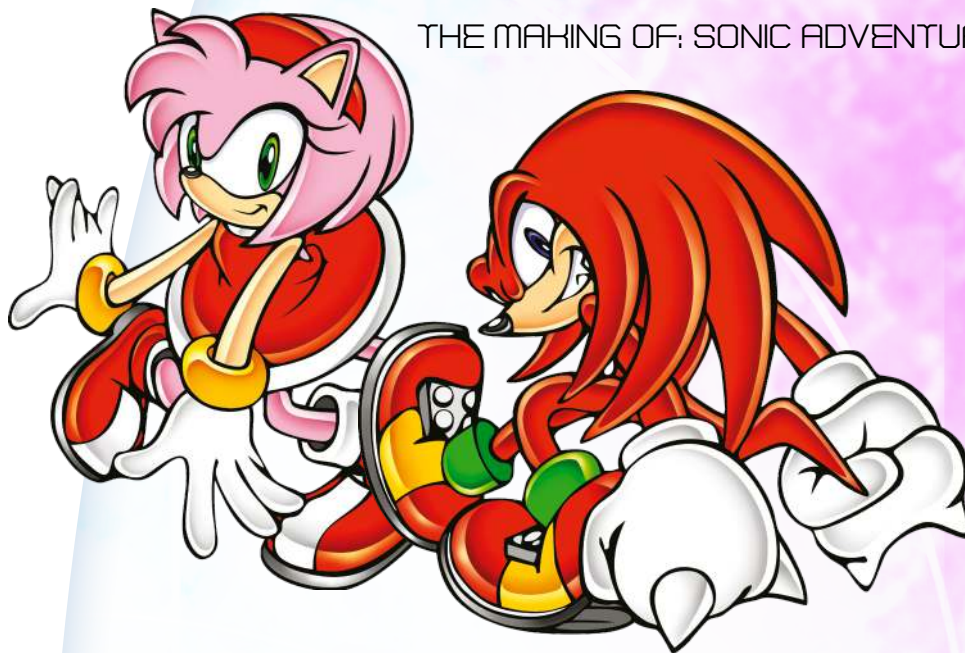


felt like it enabled me to break out of the cultural and societal norms I grew up in, which has enriched my personal and professional life ever since."

For Iizuka, the game's announcement at Tokyo International Forum was a highlight. "The most memorable moment for me was the announcement of *Sonic Adventure*. The hall fit 5,000 people and I was up there three times, but that was the first time I had ever been on stage in front of consumers and I was so nervous I thought my heart was going to burst out of my chest," recalls the director. "I was on stage to play Speed Highway in a live environment. On my first stage event I was able to play really well and made no mistakes, so I was able to calm down, but the other guys told me, 'Hey, if you are too good, people are going to think we are just playing back a recorded demo video. Can you make a mistake next time?'"

20 years on, plenty of fans still have fond memories of *Sonic Adventure* too. But what do the creators think keeps people coming back? "If I think of what the appeal of the title is, as a fan myself, I would have to say it is because each of the characters has such a deep story," says Hoshino. "The story continues still to this day and seems to be expanding instead of coming to an end. For example, one could probably still think, 'I bet Big is probably fishing right now.' In addition, I'm sure there is also the expectation that someday in the future we would make a sequel or continuation in the series."

Iizuka believes that it's the totality of the game, rather than any individual aspect. "It was the first high-speed 3D action game that also featured a scenario highlighted with six different stories, the A-Life Chao, six unique styles of gameplay – it is a unique game offering even 20 years after its release. At the time, it also wasn't just a solitary software release, it was the title to bring people to the Dreamcast and we were given the budget to make something to showcase the hardware," says the director, clearly proud of the team's accomplishments. "However, it was the very first 3D game that we worked on and looking at it now I can see the rough edges it has, which really makes me want to remake it again," he adds with a laugh. That comment is sure to bait the fans – and can you imagine *Sonic Adventure's* ambition realised with today's tech? It's a tantalising prospect. Consider us on the hook, too. *



DOWNLOADABLE DELIGHTS

■ **Sonic Adventure made use of the Dreamcast's modem to download extra content – here's a look at what was available**

SEASONAL CELEBRATIONS

■ Events were held to mark special occasions, beginning with a Christmas celebration for the game's 1998 launch which placed trees and music in Station Square. A New Year's Day 1999 event followed, and the first worldwide events celebrated the international Dreamcast launches. Twinkle Park received a Halloween makeover in 1999, and the final event celebrated New Year's Day 2000.



COMPETITIONS

■ These themed events allowed skilled players to win prizes. Japanese players could play item-finding contests in Station Square and Mystic Ruins, sponsored by Sega and Famitsu. American players received three cobranded AT&T/Official Dreamcast Magazine time attack events in Speed Highway, Red Mountain and Sand Hill. European players could hunt Reebok trainers in Emerald Coast.

SAMBA GP

■ In celebration of the release of *Samba De Amigo* for Dreamcast, this extra course for Twinkle Circuit was made available for download. Interestingly, this is one of six Twinkle Circuit courses that are on the disc, but normally unavailable in the game – the other five are completely unused. This was the final DLC made available for the game, released on 27 April 2000.



ALSO AVAILABLE...

■ After collecting a certain number of emblems in the game, users could download shiny Chao in rare colours. It was also possible to download menu themes that replaced the default announcer with character voices, but most of these files were only released in Japan.



» [Dreamcast] Boss fights play an important role in *Sonic Adventure*, and Chaos (currently frozen) is often your opponent.

SUBSCRIBE

and choose between...

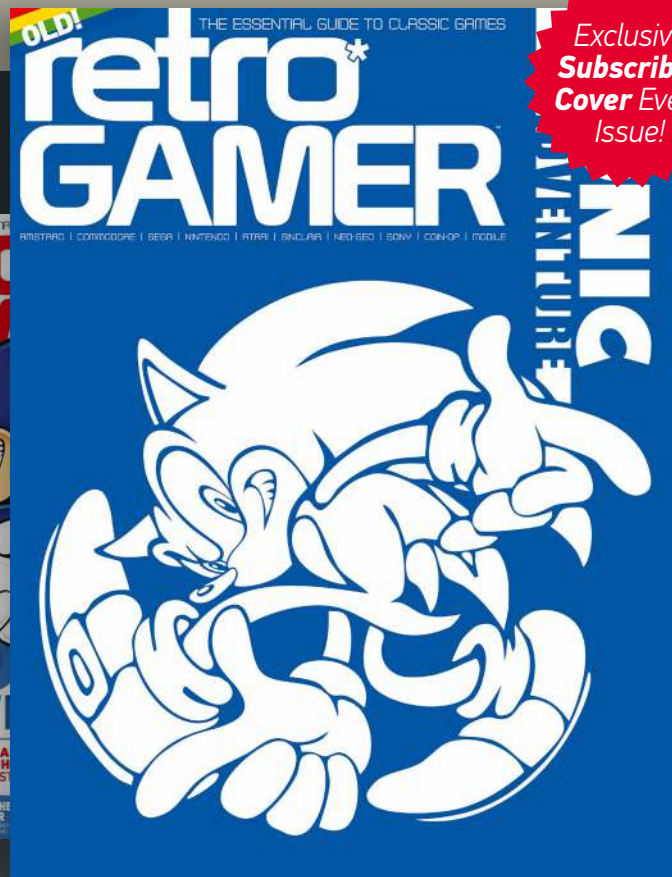
Space Invaders

or

Ms Pac-Man
Plug & Play!



SUBSCRIBE ONLINE NOW AT
www.myfavouritemagazines.co.uk/arcade19



Exclusive
Subscriber
Cover Every
Issue!

Reasons to subscribe...

- Stunning exclusive subscriber-only covers
- You'll never miss an issue!
- It's delivered direct to your door
- Brilliant value – save money on the cover price

Choose your package



£26

PRINT

Six months of
Retro Gamer in
print – plus plug
& play



£30

PRINT & DIGITAL

Six months of
Retro Gamer in
print and digital –
plus plug & play



*Terms and conditions: This offer is only available for new and renewing UK subscribers. Gift is subject to availability. Please allow up to 60 days for the delivery of your gift. In the event of stocks being exhausted we reserve the right to replace with items of similar value. Prices and savings quoted are compared to buying full-priced print issues. You will receive 13 issues in a year. You can write to us or call us to cancel your subscription within 14 days of purchase. Payment is non-refundable after the 14 day cancellation period unless exceptional circumstances apply. For full terms and conditions please visit: www.bit.ly/magterms. Offer ends 28/02/2019.

THE MAKING OF

INTENSITY

Despite dividing critics with the innovative Morpheus, Andrew Braybrook decided its follow-up should be equally original. Andrew tells us how the space puzzler Intensity became his C64 swan song

Words by Rory Milne



IN THE KNOW

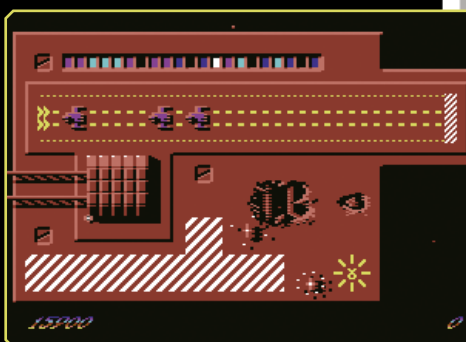
- » **PUBLISHER:**
RAINBIRD SOFTWARE
- » **DEVELOPER:**
GRAFTGOLD
- » **RELEASED:**
1988
- » **PLATFORM:**
C64, SPECTRUM
- » **GENRE:**
ARCADE ACTION



NEWS

Contrary to popular belief, former Graftgold coder Andrew Braybrook's debut title for Rainbird Software – *Morpheus* – was very well received by the majority of magazine reviewers at the time. That said, most write-ups on the game added a caveat that since *Morpheus* was so different it wouldn't be for everyone. But rather than playing it safe with his subsequent project, Andrew instead opted to put together ideas for a game that would be every bit as original as its predecessor. "*Morpheus* had a difficult birth, what with the publisher change at the end and rebadging it for Rainbird," Andrew concedes. "But I always tried to follow my nose, rather than taking much advice. By the time I finished a game I had learned how to play it, which possibly led me to think that it was too easy, at the same time I felt pressured to ensure that there was more 'game' in there than the previous one. But I knew that it was impossible to please everyone."

Having chosen to trust his instincts, the designer decided that his latest project – *Intensity* – should buck the trend of his previous C64 originals by having fixed-screen levels, rather than scrolling ones. "I wanted to use the whole screen for the game," Andrew reasons, "and I was dead set on a 50 frames per second approach; there was no other. But if you wanted to scroll the fullscreen then there wasn't a lot of time for anything else, so I decided



» [C64] *Intensity*'s colonist-rescuing remote drone relocates to your skimmer's position when you hit fire.

that 'no scrolling' was the way to go, and that led me to a tight puzzle aspect."

Puzzles were another first for Andrew, and although the outer space setting he chose for *Intensity* put him on familiar ground, he opted to have *two* player-controlled craft in his game rather than one, unlike any of his past projects. "I was heading towards a puzzle game, and the 'two ships' idea set that up," the developer explains. "The 'skimmer' was the controller and defender, and the 'drone' was a rescue ship. The layout of the platforms had more of a 3D feel because the height of the obstacles became important – since parts of the landscape couldn't be crossed by the cheaper drones and skimmers. And by having to use the skimmer to move the drone it loaded the player with another task to do."

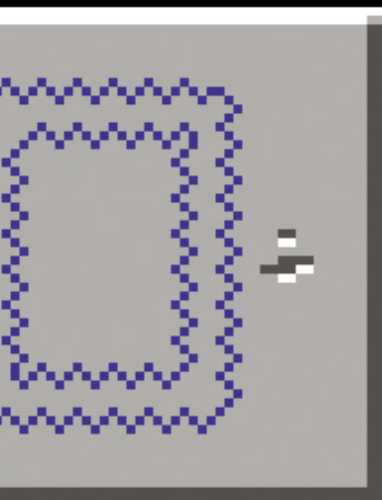
A further differentiation between *Intensity* and Andrew's previous games followed, as the designer gave his latest project's skimmer craft offensive

collision capabilities rather than a range weapon. "I was pretty sure that I didn't want bullets in this game," Andrew asserts. "I wanted the player to have to drive the skimmer at the meanies while also avoiding their drone. Bullets would probably have made life a lot easier for me, but they would have had to be done in characters, and they would have had to go in all 256 directions!"

Perhaps feeling the need to balance *Intensity*'s many innovations with some inspiration, Andrew designed alien opponents for his work in progress that referenced his earliest C64 original and a seminal movie franchise. "The mutating aliens were a nod to *Gribbly's Day Out* in a way," Andrew notes, "I liked the idea of a single, competing disorganised species. I expect that the *Alien* and *Aliens* movies were still bubbling away at the back of my mind too. It was about giving the player multiple tasks to do so that they would have to prioritise what they were doing all the time, as the different evolutionary stages of the meanies targeted either the colonists or the ships. They were vulnerable for a while as a Podule, but you knew if you didn't deal with those then they would become something nastier."

In fact, the Podules' nastier form was a little too nasty, and so Andrew worked out a way to scale back the hazard posed by *Intensity*'s overly deadly Trackers. "If the last evolutionary stage – the Trackers – headed straight for the drone they would inevitably get there before you could call it to a safer place," remembers Andrew. "So I had to come up with a zigzag attack pattern for them, ►

» [C64] It's crucial to dispatch Stalkers before they infect colonists.



GUIDE TO INTENSITY

How to tackle *Intensity's* deep-space rescue mission

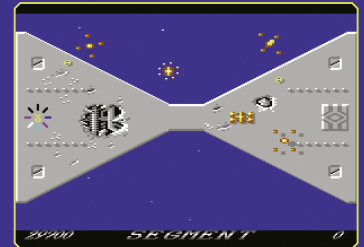


SKIMMER SKILLS

■ Learning to control *Intensity's* skimmer is key to making progress in the game. It can turn on a dime, but as well as getting you around quickly its impressive speed makes unintended collisions with deadly obstacles and opponents all too easy.

DRONE DEPLOYMENT

■ The drone remains stationary until you call it from your skimmer, but while it's in transit avoid it, as collisions destroy both craft. Locating and relocating the drone near to colonists is essential if you plan to rescue the maximum number.



COLONY CRISIS

■ As well as showing off your lack of heart, leaving colonists to the mercy of the game's mutating aliens has repercussions. In short, unattended colonists can get infected by Stalkers and evolve into Nuclons whose objective is to attack your drone.

C64 VS ZX SPECTRUM

How the C64 original and Steve Turner's Spectrum port compare

COMMODORE 64

■ Even while it's loading Andrew Braybrook's original impresses with an animated tutorial detailing how it works and how many points you get for dispatching the various stages of its evolving aliens. Thanks to Andrew clocking the game at 50 frames per second, *Intensity* on the C64 plays at a consistently speedy rate. His Commodore original also boasts some nice synth rock intro music and arcade-authentic in-game sound effects produced by his Graftgold partner Steve Turner. *Intensity* uses the C64's colour palette sparingly, but to good effect, with the end result being visually distinct stages rendered in pleasing colour combinations that contrast with the hues chosen for the game's skimmer, drone and mutating aliens. The C64 original's animated sequence is another nice little touch.



ZX SPECTRUM

■ Given the audio and colour-related hardware deficiencies of the 48K Spectrum, Steve Turner's Z80 *Intensity* does a pretty good job of replicating the pregame tune and the space station colour combinations used in Andrew Braybrook's Commodore 64 original. *Intensity* on the Spectrum also plays much like its inspiration, although there is a slight slowdown when too much is happening on the screen at the same time. In terms of gameplay, the ZX *Intensity* is a faithful adaptation of its C64 inspiration, with the main exception being that it's more forgiving – its aliens are slower to attack. This is reasonable, however, given that the Spectrum version's sprites tend to blend into the game's backgrounds. The Z80 conversion's other concessions are static loading and completion screens.



► which made them tough to intercept but gave you time to think about your approach."

But while the developer was prepared to make concessions to difficulty, he was also keen to broaden *Intensity's* challenge, and so to divide players' attentions he gave them colonists to rescue and 'resource units' to collect. "Rescuing a space station crew, with the meanies focusing mainly on getting them rather than the player, spread the focus over more of the screen," Andrew considers, "and the releasing of 'currency' when enough people had been rescued gave the player something else to think about."

o f course, *Intensity's* currency needed a purpose, and so instead of an upgrade system like the ones in his previous games, Andrew devised trading levels where players could buy replacement skimmers and drones.

"I wanted to try something different than just getting lives for accruing points," the developer muses. "It muddled the waters when you had two ships – did you get one of each when you had scored enough points or did you alternate between getting one or the other? I also tried to think of a different way of doing stuff each time, and the fact that I nearly ran out of space with *Intensity*



DEVELOPER HIGHLIGHTS

PARADIUM

SYSTEM: C64

YEAR: 1985

URIDIUM (PICTURED)

SYSTEM: C64, VARIOUS

YEAR: 1986

URIDIUM 2

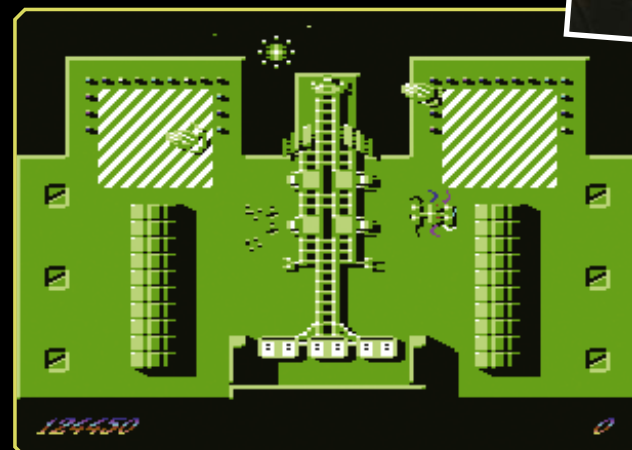
SYSTEM: AMIGA

YEAR: 1993



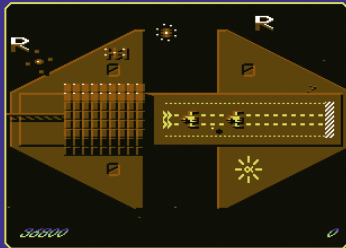
» Andrew Braybrook is currently reimagining an Atari classic – see @UridiumAuthor on Twitter for details.

» [C64] Having rescued its quota of colonists, the drone docks – which triggers the nearby escape shuttle to blast-off.



COLLECTING CURRENCY

■ Although *Intensity* revolves around a rescue mission, it also involves a certain amount of profiteering. When you rescue enough colonists, giant 'Rs' – resource units – appear on the screen, and the ones that you collect can be spent on upgrades.



BUYING PHASE
PLAYER ONE HAS 16 R.U.

COST TABLE

SKIMMERS	DRONES
9 GAMMA 5	
16 BETA 8	
19 ALPHA 11	
AUT? → DINE	
6 READY 5	
0 PENDING 0	
TIME SEGMENT 20	
6300	INTENSITY 0

TACTICAL TRADING

■ Between stages, the 'resource units' amassed in the core levels can be spent on replacement skimmers and drones, ranging from top-notch but pricey models to basic cheap ones. Prices vary depending on the grade of space station that you last visited.

MUTANT MANAGEMENT

■ The aliens attacking *Intensity*'s space stations start off as fairly benign Spores, but they soon mutate into colonist-attacking Stalkers, which can then evolve into drone-targeting Nuclons or gestating Podules that turn into skimmer-hostile Trackers.



“I’m surprised anyone remembers *Intensity*, as it didn’t sell very well, so it’s nice that it hasn’t disappeared without trace”

Andrew Braybrook

confirmed that there probably wasn’t any space for a sub-game.”

But rather than settling for simple upgrade stages with standard skimmer and drone replacements available for a set cost, Andrew introduced an element of strategy by offering three grades of each craft with correspondingly high, medium and low price tags. “You had to order up new ships, having to pick which type you wanted, with the best high-flying ones costing more and taking longer to build,” Andrew recollects. “If you were short on drones then you might have to buy a cheap one to get it quickly, which were then a liability on some of the tougher levels – the better drones and skimmers made the game a lot easier. Once you had learned how not to crash, you should have been trying to use the best gear that you could.”

On *Intensity* making players wait longer for more expensive craft to be constructed, Andrew credits the game’s predecessor and two other titles as the main inspirations for the mechanic’s inclusion. “There were some different approaches in *Morpheus* such as ordering new ship parts that you had to wait for,” Andrew reflects, “and I had previously bought two board games called *Imperium* and *Dark Nebula* that had a ship-ordering system where you had to wait for ships to be built – longer for the big stuff. I liked that you had to plan ahead and organise your spending, so I reused that in *Intensity* in simplified form – even though it was a bit odd for a rescue mission!”

In keeping with this slightly unorthodox approach, the developer decided to give *Intensity* a chart depicting multiple difficulty strands that

could be jumped between by rescuing set-numbers of colonists on certain stages. “The map showed five arms heading to the escape ships,” Andrew explains, “the arms from top to bottom were Alpha, Beta, Gamma, Delta and Epsilon. The Alpha top levels were tougher than the Epsilon lower ones, and you had to work harder to get to them. You were going to get more points on the Alpha levels, but you had to rescue more colonists to keep opening the exits to those levels. The levels didn’t all have exits up and down and forwards, so it was a bit of a maze too.”

But far from just being a maze requiring navigation, *Intensity*'s matrix of graded levels also allowed players of all skills to beat the game as well as offering numerous alternative paths to the game's completion.

“Since you could mostly choose your route, it meant that if you got a bogey level that you didn’t like then you could avoid it,” Andrew says, “you only had to get to one of the five escape ships on the right. It also meant that to see all the levels you would have to play the game five different ways.”

With *Intensity*'s inventive nonlinear level progression in place, Andrew additionally managed to squeeze one final innovation into his near-complete project – a fullscreen animated tutorial that ran while the game was loading. “The tape loader ran on interrupts, so we had most of the CPU available to do something during the load,” Andrew observes. “I really liked what we did there as it showed what the game was about in giant scale!”



» [C64] Podules may seem harmless at first glance, but following their gestation period they evolve into skimmer-hostile Trackers.

But despite *Intensity*'s original design, its lacklustre reviews and sales that it attracted on its release left its developer feeling disappointed. “*Intensity* got a bit of a roasting from some reviewers,” Andrew admits. “I think they were all bored with 8-bit and didn’t really get into the game. It was our policy to take the game around to as many magazines as we could to show them how to play it [...] that usually meant that we would get a fairer review, but we couldn’t get to everyone.”

Decades later, the renowned C64 developer has a few changes he would like to make to his puzzler, but he’s clearly still proud of *Intensity* and genuinely pleased with the reputation that its gained over the years. “Given the limitations of the C64 there’s not much I *could* change,” Andrew argues. “The skimmer bouncing against the screen edges always annoyed me, but despite trying a number of alternatives I couldn’t come up with a satisfactory solution that maintained its speed. The giant ‘Rs’ feel a little crude to me; maybe they needed a more animated and pictorial representation. But I’m surprised anyone remembers *Intensity*, as it didn’t sell very well, so it’s nice that it hasn’t disappeared without trace and that people are getting some enjoyment out of it.” ★

DOUBLE DRAGON III: THE ROSETTA STONE



INFO

- » **ARCADE RELEASE:**
1990
- » **ZX SPECTRUM RELEASE:**
1991
- » **CONVERSION TEAM:**
TOM PROSSER,
SHAUN MCCLURE
- » **AVERAGE SCORE:**
77%

The ZX Spectrum was home to a number of arcade conversions. But how were these large games squeezed into such a small machine? We speak to graphics aficionado Shaun McClure about working with coder Tom Prosser to take on the third incarnation of the fighting classic

Words by Paul Davies

The job of converting an arcade game to a home computer could seem a little daunting to a coder – especially when asked to fit it into 48K or 128K of memory.

Having worked on other conversions for the ZX Spectrum, such as *NARC*, *Saint Dragon* and *Rodland*; how did Shaun McClure start the work on *Double Dragon III*?

“We managed to get a video of an entire playthrough of the game,” he explains. “We also had two or three arcade machines in the offices, too. One of these had the *Double Dragon III* board installed so we could play it for free. This helped us get a feel for the game and decide how to take it on. We were also given the actual game graphics to work from, which was very rare.”

The first thing Shaun looked to do was convert graphics that were created for the Amiga version to the Spectrum. He explains, “First of all, we had to alter the arcade graphics for the Amiga, resize them and then take them down to 16 colours. We literally created a 16-colour palette with the Amiga program Deluxe Paint, with areas of the palette reserved for clothing colours, etc. Once we had that, we used its remap function to convert the newly resized

arcade images to the new palette. After some touch-up work, I got to work on the Spectrum version. The graphics needed to be smaller than the Amiga as the Spectrum screen was smaller, so I had to work out the new size and rescale again, overdrawing the graphics in black and white.”

Going into specifics, Shaun explains, “The Amiga version had several different bad guys to beat up, a lot of them were identical but wore different-coloured clothing. To save space in memory, the different-coloured shirts were cut and overlaid over the sprites to make them look a bit different.” With less memory to work with than the Amiga, some tricks were performed to get the game running well. “For the Spectrum, I had decided to make the leg and torso animations separate – this meant that we weren’t storing the full bodies for things like punching and so on, so the legs didn’t change. We also had to fit them into character boundaries, this meant that the odd punch had to have shorter arms. We also had to offset some of the torso frames which were another side-effect of having the torsos separate and the character boundary squashing up.”

Despite this workaround, there were still problems with memory, so cuts to animation frames were made with Shaun recalling that “every second or third animation frame” being removed. The original sprites of Jimmy and Billy had eight animation frames each – this had to be taken down to four, though the animation still looked smooth enough that both Shaun and Tom were happy with it.

With the main protagonists converted, the enemies and bosses were next to be tackled. This would turn out to be another issue to iron out, with even more frames for the chop this time. “The enemy bosses, such as the large mummy at the end of the game, had to be really butchered – despite the game being 128K-only.” Shaun explains. “Once again, we cut the legs and torsos into two sets of animations, cut the number of



» [ZX Spectrum] Legs and torsos animations were separated.

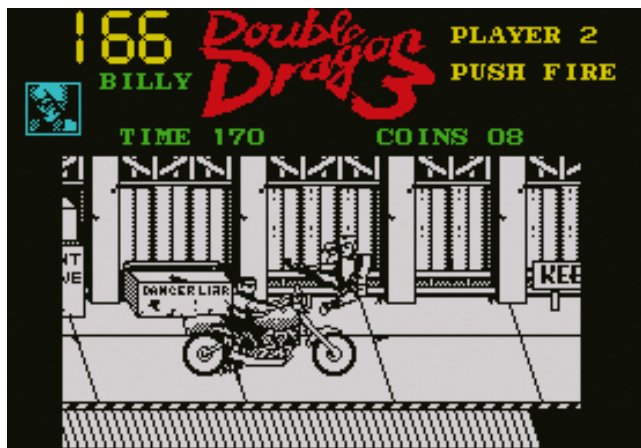
frames but this time we got rid of two out of three frames, and it looked jerky as a result. But because it was a mummy, basically we thought, ‘Sod it – it’s a mummy! Mummies don’t walk smoothly anyway!’ So we left it as it was.” Some enemies suffered an even worse fate and had to be omitted in their entirety, notably the enemies on horseback you find on level four on the arcade game.

Character sprites aside, next to be worked on were the levels.

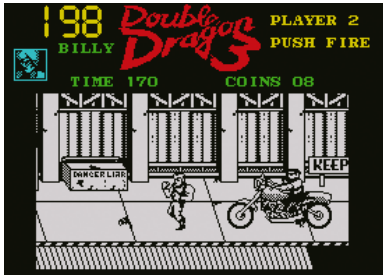
The arcade original had five large levels with multiple sections, so a lot of work had to be done to make them look good on the Spectrum. Compromises had to be made to fit these in, and to try and keep each level as close to the original as possible. “We had the levels as blocks, but we had problems converting them so we ended up drawing them from scratch,” Shaun says. “We kept them based on the arcade levels, though because a lot of these levels weren’t flat – being lots of perspective at the ends of each level – it was tricky.”

Shaun continues, “Tom [Prosser] wanted to ‘rerotate’ the blocks in memory, too. This is where, on scrolling games, we would have a version of all of the map graphics already scrolled, this meant the processor didn’t have to spend time calculating this in real time, which would really slow the game down. The downside to this method is that the blocks scroll into each other, so the more

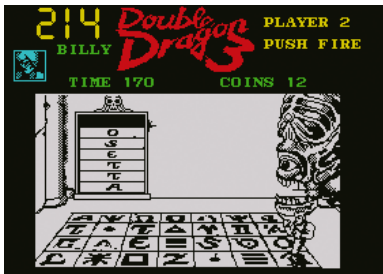
» [ZX Spectrum] The team had access to a playthrough video and the game’s graphics.



HOW ACCURATE IS IT?



» [ZX Spectrum] "I swear I heard a motobike around here somewhere..."



» [ZX Spectrum] "Oh, what big eyes you have... and teeth. Gulp."

variations in blocks of differing types that you have next to each other, the more it has a knock-on effect on the prescrolled blocks that had to be calculated. We really had to simplify some of the map areas because of this, although you really can't tell."

Having been converted by just two people, a good relationship would have been key to getting the right result. The duo was given roughly four months to complete the conversion so how did Shaun find it working with Tom? "Tom was pretty cool," he replies. "It's not often that artists get any say about gameplay, but I was the one making a lot of the decisions about enemy AI, suggesting how the mummy should move, that kind of thing. Usually artists get told to 'go away' but Tom was really receptive."

It seems Tom was also receptive when it came to Shaun adding a little humour to the game. The more eagle-eyed player may well have noticed 'Tom is a git' spray-painted along the wall somewhere on the first level and also, as Shaun remembers, "I added little touches like light switches and plug sockets inside the pyramid of the Egypt level." The scoundrel.

With all the hard work that was put into getting such a big game onto the Spectrum, Shaun is very happy with the final result. "I think the gameplay worked really well, considering we had a relatively short time to complete it, which was a good feeling as we put a lot of work into it," he concludes. ★



ORIGINAL (ARCADE)

Full-size arcade sprites

■ The animated sprites of the original have a gritty style to them. The Spectrum version has to make do with black and white offerings.

Pump up the volume

■ While the arcade game has a decent soundtrack and raucous sound effects, the Spectrum struggles to match it and the end result is rather disappointing.

Black-and-white graphics

■ One of the elements that had to be removed was the colour found in the arcade, though this was compensated by the level of detail on each character.

CONVERSION (ZX SPECTRUM)



All fighting moves included

■ You can punch, kick, jump and even perform the spinning flying kick as you take out your enemies in an array of fighting moves.

Just one shop screen

■ The power-up shops you find in the arcade version vary in each level, though the Spectrum version boasts the same screen in each stage.

ULTIMATE GUIDE:

NINJA



The Ninja Gaiden series that seasoned gamers know and love began life on the NES in 1988, yet at the same time there was an alternative arcade game featuring Ryu Hayabusa that's often overlooked. But not here, not now

Words by Martyn Carroll



NINJA GAIDEN

When it comes to elegance in videogame violence, surely nothing can top the arcade beat-'em-up.

Whether you're flipping a guy off a pier in *Renegade* or smashing a barrel over some dude's head in *Double Dragon*, it never fails to raise a smile. Tecmo was clearly aware of this when it created *Ninja Gaiden* (which was initially known as *Shadow Warriors* in Europe, due to the term 'ninja' being frowned upon at the time, and *Ninja Ryukenden* in its native Japan). Within seconds of starting the game, and finding yourself surrounded by mask-wearing street punks, you can grab onto a metal sign and while hanging there, swing up and boot a thug square in the face. Said thug then flies backwards and smashes through a phone box, sending glass flying everywhere (and revealing a bonus pick-up, as brawler law dictates).

Aside from the hang trick, and the usual kicking and punching, there's the nifty 'flying neck throw', where you grab an enemy around the neck just as you jump and propel them through the air. If you position yourself correctly, you can often use this move to ping enemies out of the playing area. You can also run up walls and perform the 'phoenix backflip', which is great for evading enemies and then

hitting them from behind. The key is to chain these moves together for increased effect and maximum swagger. It's a riot, basically, especially in co-op mode where it quickly reaches Royal Rumble levels of ridiculousness, with a chorus of thuds, smashes and screams punctuating the driving synth soundtrack.

If this sounds nothing like the *Ninja Gaiden* (or indeed *Shadow Warriors*) you're familiar with there's a good reason for that. Rather than create an arcade game and then convert it to home systems, as it had done previously with the likes of *Rygar* and *Solomon's Key*, Tecmo assigned separate teams to the arcade and NES versions and developed them simultaneously. Tecmo's Masato Kato explained the situation in *RG* issue 92, and also revealed the impetus behind the project: "In those days, 'ninja' was getting very popular in North America and the [Tecmo] president ordered us to create a ninja game for the NES while another team developed *Ninja* ►



» [Arcade] The game is easier, though more chaotic, when a second player joins in.



BOSS RUSH

Ryu encounters grotesque guardians on his USA adventure



ROUND 1: SUMO

■ Having smashed up the Viking Pub, king-size sumo guy will try to slap and lunge you to death. He's supported by several common thugs who complicate matters.

HOW TO BEAT THEM: Defeat the thugs first, then concentrate on the boss. The standard punch-kick combo works well on him and he's susceptible to neck throws.



ROUND 3: CLAW BROTHERS

■ Is that some kind of cape-wearing iron giant? No it's three urchins standing on one another's shoulders like some kind of joke circus act. Watch out for their claws.

HOW TO BEAT THEM: Three-on-one is not easy, so jump around and use the neck throw whenever you can. Dodge their deadly spin attacks by quickly darting up or down.



ROUND 5: THE DRAGONS RETURN

■ How could the bosses from Round 2 be any more annoying? Bring them back, give them new costumes and then make them even tougher.

HOW TO BEAT THEM: This really is a Royal Rumble. Just keep spamming the neck throw on anything that moves and feeding in extra credits to see you through.

ROUND 2: THE DRAGONS

■ This gurning tag team act will work together to take you down. If one grabs you he'll shove you towards his pal who'll smash you hard. Their annoyance factor is high.

HOW TO BEAT THEM: If you're lucky, you'll get a sword power-up just before or during the fight (try smashing their bikes). Failing that, keep moving and abusing the neck throw.



ROUND 4: TWIN SUMO

■ Another oversized sumo battle, only this time there are two guys to take care of – and they can withstand more damage. A couple of regular enemies add to your woes.

HOW TO BEAT THEM: They may be stronger than before, but they're still slow. Use this to your advantage. Try and lead them into positions where it's one-on-one.



ROUND 6: BLADEDAMUS

■ The final boss lurks in a lair that's wrong on multiple levels. When he's not slashing you with his twin-swords he'll toast you with his flaming dragon breath.

HOW TO BEAT THEM: There's a sneaky trick. Jump up so that you land behind the boss, then unleash your combo. Keep repeating this and you'll topple him in no time.



“The arcade game was not overlooked on release and was well received by outlets”

► *Gaiden* for the arcade separately. They were totally different products.”

So that's why we have the bombastic arcade brawler, with its large sprites and over-the-top action, and the very different NES version which is more of an action platformer designed with the home gamer in mind. Besides different game types there are many other changes. In the arcade game the ninja is unnamed and we just assume that it's Ryu Hayabusa. That's fine – but who's the orange-suited ninja who joins him when a second player joins in? Also, Ryu mainly fights unarmed and his famous sword is a time-limited power-up, whereas on the NES his sword is his life.

Then there's the plot. On the NES, Ryu travels to the USA to avenge the death of his father and the story escalates through a series of comic-style cutscenes. Yet the coin-op proposes some nonsense about our hero heading to America to defeat a cult led by a descendant of Nostradamus. Rather than cutscenes that advance the plot, there are a series of 'photos' displayed between stages that show Ryu enjoying some vacation downtime – eating, gambling, white water rafting. It's a bit silly



» [Arcade] If only Ryu had time to enjoy the striking Manhattan skyline.

and superficial, but then so is the game as a whole. Things take a sinister turn when you lose all your lives and a memorable continue screen appears, showing a buzzsaw being lowered towards Ryu's midriff. Talk about a bribe! Do you insert another credit or wait for the saw to seal his fate?

These days the NES version is better remembered as it spawned several sequels and led to the celebrated Xbox reboot in 2004 (which was titled *Ninja Gaiden* in all regions, thankfully). But the arcade game was not overlooked on release and was well received by a number of outlets. Critics acknowledged the inherent lack of originality – the brawler was hardly fertile ground by this point – but the presentation and gameplay was praised. "It's great fun," wrote *C&VG* in its monthly Arcade Action round-up. "A slick beat-'em-up containing nothing startlingly new but with smooth graphics and masses of action." Nick Kelly awarded the game 8/10 in *Commodore User*, writing "It really is



» [Arcade] Some 2D 'tightrope' sections add a little bit of variety to the gameplay.



CONVERSION NINJA

Graphic artist Mark Potente worked on the Commodore 64 version



Can you describe how you got this particular job? Were you working at Teque Software at the time?

I had been working at Teque/Krisalis for a year or so before the work on *Shadow Warriors* [*Ninja Gaiden's* name in Europe] for Ocean came up. It was quite different to previous games as there was more than one artist covering various disciplines.

What was your actual role on the game? You're credited with 'backdrops', while Mark Harrap and Jason Wilson are credited with 'sprites'.

I was in charge of the backgrounds for each stage. It was quite a challenge, taking the graphical quality of the arcade machine and reducing it down, whilst trying to keep the same feel and style. As I mentioned, it was normally one artist that covered the entire conversation, but due to the size of *Shadow Warriors* we split the workload.

Did you guys have access to the coin-op, and what did you think of it?

Normally, the publisher gave us access to the arcade machine, sending one to the studio, but that didn't happen this time. Instead we received a dump of graphic files



» [C64] If you managed to get this far you were doing well. Or cheating.



» [C64] For the main sprite a high-res overlay was used to make it stand out.

which we converted so that they could be used with the C64 version. As for the game itself, I felt *Shadow Warriors* had enough variation to make it better than the average side-scrolling beat-'em-up.

Can you remember any drama during the development or was it a fairly smooth job?

The conversation went quite smoothly. I used OCP Art Studio to create the graphics and I recall it was the Atari ST version so I had access to a mouse, making it a lot easier. I enjoyed my time doing the backdrops. I loved the challenge of trying to create the images with a minimal palette.

The Commodore 64 version scored average marks when reviewed in the magazines of the day. What's your personal assessment on how it turned out?

As with any arcade conversion back then, trying to get the feel and look of the arcade machine was always going to be difficult. I think what we achieved deserved the average scores it received – although I remember that the graphics did get a decent score!

CONVERSION CAPERS

Which of the various home versions comes out on top?



COMMODORE 64

■ The C64 version looks good (despite the enemy sprites lacking detail) but plays poorly, with wonky collision detection leading to frequent frustration. Some elements are missing, too – there are no poles to swing on and the New York freeway is suspiciously quiet.



AMSTRAD CPC

■ Despite using much smaller sprites than the Speccy version, this runs at a snail's pace and is barely playable as a result. The screen flicks, rather than scrolls, too. The Mode 0 graphics are nice and colourful, sure, but that's about it for this weak release.



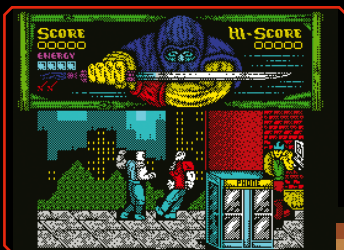
AMIGA

■ This is it – the best home conversion available, by some margin. It's extremely accurate throughout, and even recreates the opening cinematic from the coin-op. Support for two-players is included, and it's hard to imagine how this could be any better.



ZX SPECTRUM

■ It may look ridiculous today, with its large characters and their even larger sprite masks squashed into a tiny playing area, but this was widely seen as a solid coin-op conversion on release. It's technically impressive and faithful to the original arcade version.



PC/DOS

■ It may bear the title 'Ninja Gaiden' but this looks and plays more like a knock-off than an official version. All the cool moves are missing, which makes the gameplay especially repetitive. The in-game music is beyond awful. In fact, it's just awful all-round.



ATARI ST

■ This looks a lot like the Amiga version, minus some graphical trimmings. But actually play it and you find that it's flick-screen rather than scrolling – not ideal for a *scrolling* beat-'em-up. The sound is good, though not up to arcade or indeed Amiga standard.



ATARI LYNX

■ The only console conversion is pretty good, offering up a faithful version of the arcade game that can be played on the go. That said, two of the original six stages are missing and, while it's not a deal breaker, you can't hook up two Lynx consoles for co-op play.



► the next generation for *Double Dragon* fans." Newsfield's Robin Hogg played the game when it debuted at London's ATEI show in January 1989 and was impressed. "With this product Tecmo looks set for stardom," he reported in *The Games Machine* magazine. "If this isn't converted to home computers within the year I will eat my PCB."

Robin was saved from a copper and silicon supper as Ocean Software secured the rights and released the game for multiple home computers the following year.

Ocean's versions were for the European market, so it used the *Shadow Warriors* title, and they were developed out-of-house by Rotherham-based Teque Software. According to an interview with the Teque team, published in *Zzap!64*, Ocean handed it the job in December 1989 and gave it four months to develop five different versions (Commodore 64, ZX Spectrum, Amstrad CPC, Amiga and Atari ST). Versions were later released for the PC and Atari Lynx under the title *Ninja Gaiden*. To confuse matters further, the versions for the Master System, Game Gear, Game Boy, PC Engine and Mega Drive (unreleased, but have since been leaked) were all based on the NES game.

The arcade game was largely forgotten until the series was revived on the Xbox. The original 2004 game featured the NES trilogy as a hidden unlockable, while the enhanced *Black* update included the arcade game. Its surprise inclusion strengthened





» [Arcade] Move along, there's nothing to see here. Just some muscular mermen blocking the way.

the game's ties to the series, and this was cemented in the 2014 spin-off *Yaiba: Ninja Gaiden Z* where Ryu's history file lists the following claim to fame: "Single-handedly killed hundreds of members of the Cult of Nostradamus." And so our nameless ninja from the original coin-op was officially identified after all these years. In addition to its inclusion in *Ninja Gaiden Black* the arcade game was added to the Wii Virtual Console in 2009.

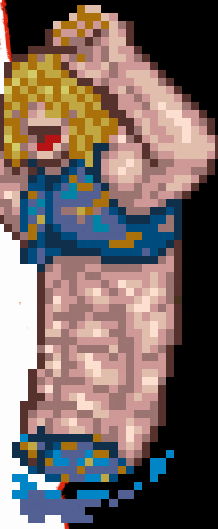
The Japanese word 'gaiden' is generally understood to mean 'side story', so *Ninja Gaiden* was always an odd title (it was reportedly chosen as it 'sounded cool' to Western audiences). In retrospect, however, it fits the arcade game perfectly as it's a chapter of Ryu Hayabusa's story that can be enjoyed as a strand of the core series or entirely on its own merits. ★

“The arcade game was largely forgotten until the series was revived on the Xbox”



» [Arcade] The nightmarish continue screens sees Ryu face death-by-buzzsaw as demons look on. Fade to red...

» [Arcade] In this case, it's probably a wise idea that what happens in Vegas, stays in Vegas.



CONTINUE... OR DIE?

Other games that mimicked the buzzsaw continue screen

TECMO KNIGHT ▶

■ Trust Tecmo to revisit the feature in its very next game. In this one, the game's hero is about to be swallowed by a huge beast, and he vainly tries to hold its jaws open. If the beast is allowed to win you don't see anything, but a nasty crunching sound is heard.



◀ CONQUEST OF THE CRYSTAL PALACE

■ It wasn't just arcade games that tried this trick. When you lose your lives in this obscure NES title, the young protagonist is seen suspended over a rising lava lake while Zap the dog looks forlornly on. Family entertainment at its finest.

THE PUNISHER ▶

■ When Frank Castle cops it in this violent beat-'em-up based on the popular comic book hero, an operative frantically performs CPR to try and bring him back. In two-player mode Nick Fury joins him in the resuscitation room. The whole sequence is very arresting.



◀ FINAL FIGHT 3

■ All three games featured creative continue screens but this one is the most intense, showing a spiky plate being lowered towards the hero's face as they squirm in their straps. Okay you win Capcom, we'll continue – we don't want to become a pancake.

THE MAKING OF:

POSTER PASTER

It's been 35 years since legendary C64 software house Taskset was founded so we caught up with four of the original team to ask whether Bill Stickers really was innocent

Words by Paul Drury



IN THE KNOW

- » **PUBLISHER:** TASKSET
- » **DEVELOPER:** IN-HOUSE
- » **RELEASED:** 1984
- » **PLATFORM:** Commodore 64
- » **GENRE:** STICK-'EM-UP



» The Taskset team: (left to right) Paul Hodgson, Andy Walker, Andy Rixon, Mark Buttery – if you look carefully, you'll see their younger selves in the background.

It began in early 1984. Coder and musician Paul Hodgson was tapping away at his keyboard in the Taskset offices on Bridlington High Street when suddenly a face appeared at the window. "You don't expect that because we were on the first floor," quips Paul. "It was the male half of a husband and wife window cleaning team. He would climb up, she'd throw up the soapy rags, he would do the cleaning and then scurry down the ladder and move it along... there was just something funny about the setup, and we thought, 'There's an idea for a game there.'"

Rather than a window-cleaning sim, the team focused on the ladder-manoeuvering aspect and Bill Stickers was born, a put-upon labourer charged with pasting up increasingly large advertising posters on increasingly awkward hoardings. Positioning your rolls of paper was tricky enough, even without the array of

enemies interfering with your work and the shifting consistency of your paste. It was a dirty job, especially in later levels when annoying busybodies jumbled up your posters when you weren't looking and tampered with your ladder length. It wasn't the first time Taskset had based a game around a working class pursuit either, whether it be plumbing in *Super Pipeline* or staggering home in *Bozo's Night Out*. Was this them doing their bit for the class struggle? "Maybe that's pushing it," replies company founder Andy Walker. "Though even when we made a space game, you were always just a working class spaceman."

That gets a chuckle from the boys, who have gathered together at Play Expo in Blackpool to celebrate the 35th anniversary of Taskset's birth. The seaside setting is appropriate as the team always embraced their Bridlington home and frequently referenced it in their games. Indeed, the street scenes of *Poster Paster* are delightfully mundane, with each drainpipe and shop window carefully crafted, yet the pavements are patrolled by all manner of weird creatures, from Gnurds to the very Yorkshire-named Wazzocks. "We gave it that isometric view to get away from the flatness of the posters," explains graphic artist Andy Rixon, whose talents gave Taskset games a distinctive, picture postcard look. "As for those strange enemy sprites, I think they asked me to do them just to make my job harder!"

"Actually, handling the sprites was difficult," interjects coder Mark Buttery. "When we designed the game we were quite crafty. We coded it to fit in



» [C64] Many of the posters referenced other Taskset games – can you tell what this one is yet?

with the limits of the hardware, so we had different 'bands' on the screen and we could use the eight hardware sprites [the C64 had] in the top half of the screen for the poster and then reuse them for the Bill Stickers character and the enemies at the bottom of the screen. It used the machine's raster interrupt and was something we started with *Gyropod*."

This clever trick may well be the first example of sprite multiplexing on the machine using this 'zoning' method and allowed some impressively bold poster designs, which featured pastiches of the Commodore and Apple logos, the latter because a souped up Apple II was at the heart of the Taskset development system.

And in a prescient bit of guerrilla marketing, several of the posters featured adverts for the team's own games. "It seemed the logical thing to do," says Andy Rixon. "If we'd been smarter we'd have sold the advertising space!"

"The detail on the posters took up a lot of memory," adds Paul, "and we only had 38K to fit it all in, so the street scenes were all algorithmic. Andy would create little blocks, say of a corner of a brick or a bit of a window, then you'd describe how you'd draw the screen made up of all these pieces. It wasn't a bitmap so the screens themselves took up knack-all space. Knack-all is less than shedloads!"

The team squeezed in a lot of features. The posters peel off the wall if you don't complete the job quickly, a rival appears on screen six who you need to beat in a pasting duel and you must monitor your 'Paste Consistency Gauge', or PCG for short. "That was a little homage to *Personal Computer Games* magazine," grins Andy Walker. "They liked us. In fact, one of their journalists, Tony Takoushi, makes an appearance in the game. We could never get his surname right so one of the adverts is for Tony's Jacuzzi."



» [C64] The 'duel' screen in *Poster Paster* was inspired by the old arcade game *Boot Hill*.

There's lots to discover and smile about in the game, though just as much to grind your teeth over. Picking up a poster is finicky, placing it correctly can be a frustrating process of trial and error and having to click a flashing button on the pavement to alter the height of your ladder is as irrational as it is annoying. "Listen, we got Andy's son to test it and he was really good at games," explains Paul, defensively. "He would say if it was too easy and we had to listen to him because he was the boss's son! Anyway, it had to be hard because we ran a competition with a magazine for anyone who could complete the last screen."

Yes, level 12 is made up of nine posters each containing an image which makes up a secret phrase and Paul assures us someone did win. But how did the game do in the marketplace, we wonder? "Middling," replies Andy, in his dulcet Yorkshire tones. "There was a lot to it without relying on dynamic shooting. It was about thinking and about learning. You had to take your time and work out how to get through a level. It let you experiment. And it definitely deserved to do better." ✳

Thanks to Alan Ullman of amigausers.ie for the photo, and you can watch the Taskset 35th anniversary talk on YouTube thanks to RetroUnlim.com

POST HASTE

Follow these handy tips to avoid getting stuck



POSITION

■ It takes a while to work out where to place your ladder to successfully and securely paste your posters to the hoarding. Use the left-hand-side rail and rungs as points of reference.



ORDER

■ The posters are all stored in a rack at the side of the screen, initially in the position they need to go on the hoarding, but watch out for the interfering gnome who jumbles them up in later levels.



CONSISTENCY

■ Paste can be fired at enemies but if you over do it, it becomes too stiff to use. If it's too runny, or the hoarding itself is too wet, your posters won't stick, so keep an eye on your Paste Consistency Gauge.



SOLIDITY

■ The watering can is your friend – let it dilute the contents of your bucket if it becomes solid. Vinny Mainolfi of hackersoft.co.uk, has also created some handy cheats for the game.



» [C64] Big posters like this one can be tricky – take too long and they can start to peel off the hoarding.



COKTEL

Best known for its Gobiins series of games and a wealth of educational titles, Coktel Vision also taught the gaming world how to explore this groundbreaking medium as a powerful storytelling device

Words by David Crookes

There was a time when the term 'very French' was used as a short-form label for Gallic games that were deemed a tad offbeat. It would typically be found nestled within articles by journalists grappling for a better description and it hadn't gone unnoticed by those who worked in French game development.

"The UK press considered games made in France to be 'different,'" affirms Emma Kreuz, former PR manager of the Parisian publisher Coktel Vision. But there was a reason for this. They were different to an extent. French games were typified by their creative, high-quality coding, technology-pushing techniques and penchant for adventure/arcade-style titles. And Coktel Vision was among the pioneers.

Founded in 1984 by engineer Roland Oskian, the publisher made an immediate impact in France by specialising in simulations, action and adventure games. "I was passionate about movies, music and

technology," Roland tells us. "I'd discovered a business simulation game during my studies and I loved it."

Roland had worked for the space division at Matra and he saw a good business opportunity for software, believing it to have a great future. He also believed it was important for developers to be innovative and he would eventually see this as a key for success. "We had to fight the foreseeable rival of the Japanese giants with their consoles and define a real strategy," he says. Freedom of expression would play an important role.

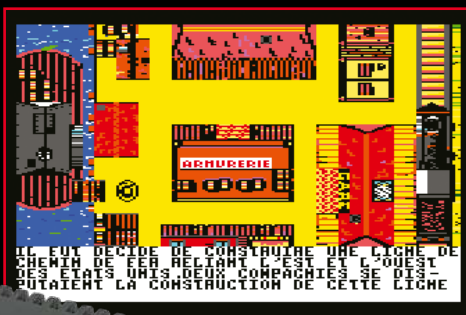
Also in 1984, issue 14 of the French videogame magazine *TILT* had published a lengthy article by journalist Guy Delcourt which not only explained that gaming was still in its infancy in France, but also found that developers valued originality and wanted to produce games which reflected their country rather than simply ape the more lucrative scenes of the UK and USA. One way of doing this was through narrative. The impressive graphic text adventures *La Malédiction De Thaar* and *Poséidon*, both released in 1985, were evidence of that.

Poséidon was cocreated by Jean-Yves Baxter and Michel Denajar with input from Laurent Korngold, Coktel's first employee. At the time, the company was tiny. "We began working in the Oskians' house," Laurent recalls. "Roland would create music and his wife made covers and produced graphics."

Concentrating on games for the Thomson computers and the Amstrad CPC to begin with, the publisher soon grew. As well as producing titles for the gaming masses – such as Laurent's racing game *Raid Sur Ténéris* – Coktel also sought to capture the educational market in a bid to appeal to parents and teachers.

"I'd just finished my engineering studies when I met Roland at the beginning of 1985 and that's when

» [Amstrad CPC] *Lucky Luke* was based upon the Belgian western comic series which dated back to the mid-Forties



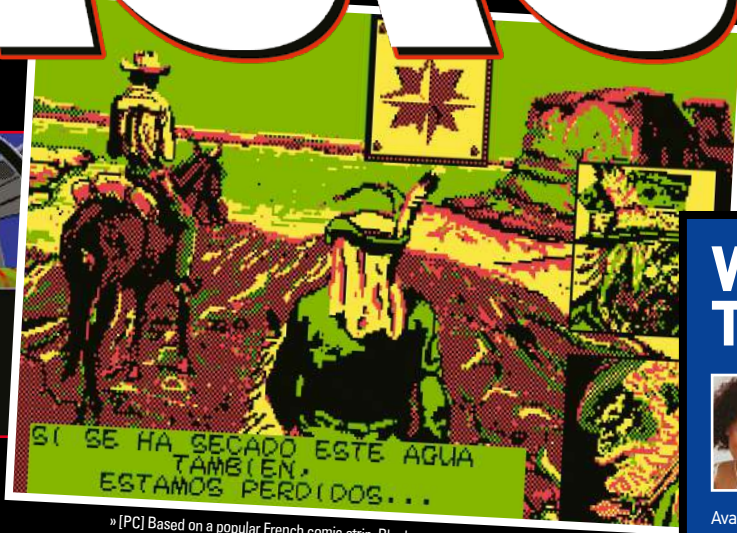
» Amstrad and Thomson systems were popular in France, so naturally Coktel Vision developed its first wave of games for them.



VISION



» [Amiga] *Paris Dakar 1990* was a licensed first-person racer published under Coktel's gaming label Tomahawk.



» [PC] Based on a popular French comic strip, *Blueberry* took on a graphic novel format and allowed players to determine what happened next.

I proposed Coktel publish software that would help French children learn English," says Coktel coder Arnaud Delrue. Released as *Balade Au Pays De Big Ben*, Coktel's first stab at such a title was followed by a mathematics game called *Équations-inéquations* and the crossword app *Mots Croisés Magiques*. By 1987, edutainment titles were a key part of Coktel Vision's output and Arnaud had become the company's equivalent of a CTO.

From the perspective of the general gamer, Coktel's golden period fell between 1985 and 1994 when it seemed to run at full speed with a plethora of releases. It mixed original games with lucrative licences, some of which were pulled from French-Belgian comics.

Among them was *Astérix Et La Potion Magique* for the Amstrad CPC and Thomson MO and TO machines – a fun, cartoonlike platformer bundled with a mini-puzzle and a black-and-white comic called *In 50BC*. There was also *Lucky Luke* who starred in the 1987 game *Nitroglycérine* which tasked the hero with guarding a train over five episodes.

Coktel also had its own characters, among them James Debug who made his debut in Marianne Rougeulle's platformer *Le Mystère De L'île Perdue*. This provided mystery escapism and tasked players with collecting pieces of a cassette recorder. It nestled among more lacklustre titles as the beat-'em-up *Duel*

2000 (which failed even to offer style over substance) and the marginally better racer *Cap sur Dakar*.

It wasn't until 1987, however, that Coktel Vision really got into its stride thanks to the huge talent of Muriel Tramis who had joined following five years as a specialist in automation and computer science at the French weapons manufacturer *Aérospatiale* where she programmed military drones.

Despite being new to game design, Muriel – along with all of the other developers – was given freedom to pursue the projects she felt comfortable with. As a fan of adventures, she designed *Mévilô* for the CPC, TO7, Amiga and Atari ST, drawing upon Antillean culture as a nod to her roots in Fort-de-France on the Caribbean island Martinique.

Joining forces with Martiniquan writer Patrick Chamoiseau, one of the founding figures of the black literary movement *Créolité*, Muriel was convinced the tales and legends from that part of the world would make for a strong scenario within her game. In doing so, she took gaming in an bold, artistic direction, having players assume the role of a parapsychologist in a first-person point-and-click adventure set in the days before Mount Pelée unleashed its destruction.

Published in French and German, it highlighted the island's history, primarily through multiple-choice ▶

WHERE ARE THEY NOW?



Muriel Tramis

■ Having remained at Coktel Vision until 2003, Muriel Tramis became the CEO of an edutainment, games and animated movie company called

Avantilles. In July 2018, she was appointed to the rank of Chevalier Of The Legion Of Honour, the highest order or merit for military or civil service in France. Much of this was for her work with edutainment, not least the creation of the *Adi* series.



Arnaud Delrue

■ Arnaud set up a company called Hortus Soft in 1998 with Philippe Lamarque and Matthieu Marciacq, producing interactive, educational

online software. He continued to develop websites before moving into app production after 2010 for iOS and Android. He's now working on an educational app for children called *Wiloki* and a gaming app that uses geolocation and augmented reality called *Randosmart*. He develops with Roland Oskian who he has now worked with for more than 30 years.



Emma Kreuz

■ After Coktel's takeover by Sierra On-Line, Emma Kreuz was promoted from the role of European PR manager for games and edutainment

to European brand manager for Cendant Software and Sierra On-Line. She then spent 16 years with Dubbing & Localisation Multimedia in Madrid as sales and marketing director for a company that translates, dubs and subtitles content. Today, she is the CEO of ACE – Audiovisual, Communication And Entertainment Agency.



» [DOS] *Gobiilins* was packed with humour and looked great thanks to the fun graphical style lent to it by artist Pierre Gilhodes.

TIMELINE

- 1984 ■ Coktel Vision is founded by Roland Oskian.
- 1985 ■ The company releases include *Cap Horn*, *Raid Sur Ténére* and *San Pablo*.
- 1986 ■ The first *Asterix* licensed game launches.
- 1987 ■ Muriel Tramis joins Coktel Vision and debuts with *Mévil*.
- 1988 ■ Tomahawk is created as the label for Coktel's games.
- 1989 ■ Erotic adventure game *Emmanuelle*, based on the, err, 'powers of seduction', is released.
- 1990 ■ Fighting game *No Exit* is released (and even gets a GX4000 version).
- 1991 ■ *European Space Simulator Mega (ESS Mega)* proves a stunning simulation.
■ *Gobiilins* is released and becomes Coktel's best-known game.
- 1992 ■ Coktel Vision becomes a subsidiary of Sierra On-Line.
■ Edutainment videogame *Adibou* launches, cementing Coktel's educational market share.
- 1993 ■ *Lost In Time* by Muriel Tramis is Coktel's first FMV PC adventure game.
- 1994 ■ The child-focused, cartoonlike Playtoons series is launched.
- 1995 ■ The first-person space combat videogame *The Last Dynasty* is shot down by reviewers.
- 1996 ■ *Urban Runner* flops.
- 1997 ■ Sierra On-Line submerges into the Cendant Corporation.
- 1998 ■ Sierra becomes part of Havas Interactive which is acquired by Vivendi.
- 1999 ■ Roland Oskian leaves Coktel which focuses more heavily on educational-focused games.
- 2000 ■ Coktel treads water and a string of *Adibou* games continue to be released.
- 2003 ■ Muriel Tramis leaves.
- 2005 ■ Vivendi Universal Games is acquired by Mindscape.
- 2011 ■ Mindscape closes, causing Coktel's history to end, too.

► puzzles, and it earned Muriel a silver medal from the Parisian department of culture, cementing a reputation for Coktel Vision in the process. Roland's decision to allow developers to experiment had paid off, creativity if not economically. As such, Coktel continued to greenlight some sterling original work: the slave rebellion game, *Freedom* – a title that mixed adventure with role-play, strategy and combat – certainly ensured Muriel was able to continue marking herself out as a pioneering game designer.

The move was not always appreciated or understood. Issue 40 of *Amstrad Action* in the UK didn't know what to make of *Freedom*, for example ("For: strong plot, historical setting etc. Against: trite rubbish, bad taste, etc", it wrote). Eyebrows were also raised over Muriel' more daring adventures, notably *Emmanuelle: A Game Of Eroticism* in 1989, based on the novel by



» [Amstrad CPC] *James Debug* made good use of the colourful Mode 0 of the CPC.

Marayat Rollet-Andriane about a woman on a voyage of sexual self-discovery.

Muriel produced *Geisha* and *Fascination* in the same erotic vein, promoting women in lead roles years ahead of *Tomb Raider*. She continued this trend with the point-and-click adventure *Lost In Time*, a boundary-pushing title that blended graphics with live action. Muriel would later say that she wanted her heroes to use logic, intuition and persuasion rather than blast their way out of the situations they faced. It helped set Coktel Vision apart from other studios.

Not that the publisher didn't pump out **tried-and-tested games**. It released *Asterix At Rahzade* (which was divided between a point-and-click and mazelike game). It also created more straightforward licensed racers such as *Dakar 4x4* and *Dakar Moto*. At the same time, it continued to strengthen its educational portfolio and so a decision was made. "We created Tomahawk as a trademark label for the games and used Coktel for the education software," says Arnaud.

Another division, MDO, was created too. Named after Matthieu Marciaq, Arnaud and Roland, this was responsible for the bulk of the company's engineering, leaving graphic and design to be produced from Coktel's offices on the outskirts of Paris, in 9 Rue Jeanne Braconnier, 92360, Meudon-la-Forêt. All the technical departments were placed within MDO and the games it worked on included Muriel' *Gobiilins* series which she developed alongside Pierre Gilhodes from 1991.

Gobiilins soon became the game most associated with *Coktel Vision*, putting the player in control of three creatures, one strong and athletic, one magical and one able to pick up and carry objects. They were used to solve difficult puzzles, sometimes by trial and error, and

THE DNA OF COKTEL VISION



SENSE OF SELF

■ Coktel Vision was unafraid to reflect French culture and history, whether in France itself or one of the territories it controlled. Muriel Tramis' projects drew on her own family history, the *Asterix* games indulged a long-running French cartoon series and *James Debug* even explored the capital in *James Debug: Le Mystère De Paris*.



EDUCATION, EDUCATION, EDUCATION

■ Edutainment games made up a large portion of Coktel Vision's output and became its entire focus for the final ten years or so of its life. The friendly alien Adi (who borrowed the eyebrows of Coktel president Roland Oskian) became a staple in the life of many a French elementary school pupil.

“Coktel was in a strong position with the Adi and Adibou series which were leaders”

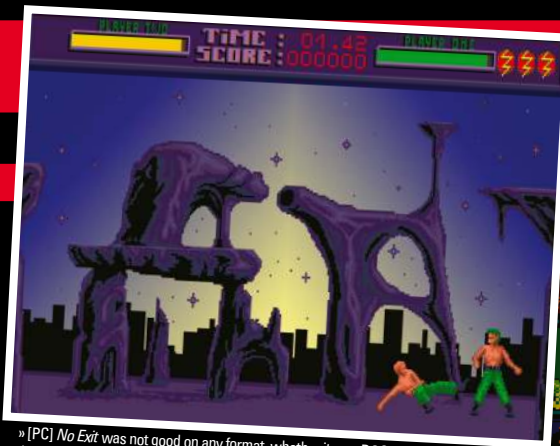
Yaya Gacko

the game made for an addictive, good-looking jaunt that achieved huge success outside of France, too.

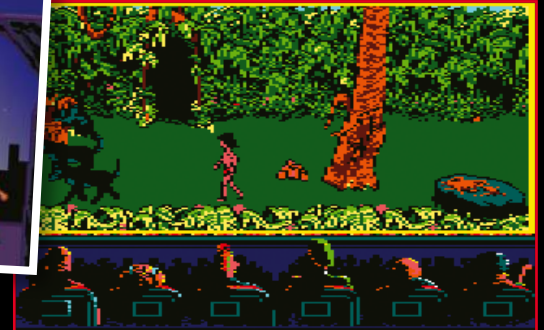
Coktel's solid background in development prompted Sierra On-Line to acquire the publisher in 1992, with Sierra's bosses, Roberta and Ken Williams, believing the company's penchant for point-and-click adventures to be a good fit. Sierra's strategy was to take Coktel's success and capitalise on it worldwide, translating the French games into English and working to make them sit better with an American audience while getting Coktel to translate Sierra's game into French.

Gobliins II was published by Sierra as was the point-and-click *Inca* (an off-beat game that began in an ancient Incan temple but saw players shoot into space before settling on a floating, smoothly 3D-rendered Spanish galleon). Other titles included *Gobliins III*, *Inca II*, *Ween: The Prophecy*, *Bargon Attack* and *The Last Dynasty*, all of which were marketed by Emma who loved the approach the French designers were taking.

Emma worked closely with the rest of the company. "I was based in the same building and on the same floor as the management, sales, marketing and development teams," she says. "There were development teams for each games but since all of them were written in-house by the same staff, the same graphic artists, programmers and so on worked



» [PC] *No Exit* was not good on any format, whether it was DOS or the GX4000 console (the latter is considered the worst of them all).



» [Amstrad CPC] Only one Coktel game was ever released for the C64: *Emmanuelle*. *Jungle Book* was rumoured, but only arrived on the Amstrad CPC, Atari ST and Amiga.

on various games, sometimes one after the other and sometimes at the same time.”

Thanks to her efforts, Coktel had a strong relationship with the French press and it grew its contacts in the UK, Germany, Italy and Spain too. “I think the Coktel

games were very aesthetic which is a very French thing in general,” she says of the reasons the titles seemed to go down well. “*Inca* was quite beautiful and the *Gobliins* range had real original cartoon graphics. Games like *Fascination*, *Geisha* and *Emmanuelle* also had the ‘erotic’ touch that was not common in British or American games.”

As the Nineties wore on, however, Coktel became less prolific. It created an adventure series called *Playtoons* which ran for five games in 1994 and 1995 but it also suffered a major blow when *Urban Runner*, a sequel to *Lost In Time*, flopped in 1996. By this stage, Coktel had cornered as much as 75 per cent of the edutainment market in France, following Roland's dream, making characters such as the alien Adi and his cousin Adibou well-known in schools up and down the land. It was decided that Coktel should become more focussed on education rather than adventures. Sierra On-Line, meanwhile, continued to use Tomahawk as a distributor for its own games in Europe.

From that point on, Coktel pumped out one *Adibou* game after another and, when Sierra was acquired by Havas Interactive in 1999, the educational titles truly became its sole focus, with distribution mainly confined to Europe. “It was still a good time for Coktel,” contends Yaya Gacko who joined around this time. “Coktel was in a strong position with the *Adi* and *Adibou* series which were market leaders.”

Nevertheless, Roland left in 1999 and, three years later, trouble brewed when Vivendi – the company which bought Havas Interactive and renamed it Vivendi Universal Publishing – posted a non-cash loss of €13.6 billion in 2002, forcing the French chairman Jean-Marie Messier, to resign. “It was a big turning point because the new management team thought the future was videogames and not education so the idea was to subcontract some Coktel titles such as *Adiboud’chou*,” Gacko says.

Muriel continued working on education games until 2003 and, two years after she left, the company was snapped up by Mindscape, with Coktel concentrating on edutainment titles again. The good times really had come to an end. “But for me, it was a great adventure,” Arnaud laughs, the irony certainly not lost on him. ✱



ADVENTURE GAMES

■ A huge number of Coktel's games were adventures, many of which were well-received point-and-clicks. Muriel Tramis was a big fan of adventures and they continued to be made in droves following Sierra On-Line's takeover of the company in 1992, with *Bargon Attack*, *Ween: The Prophecy*, *Inca* and *Lost In Time* among them.



STUNNING GRAPHICS

■ French developers paid special attention to the graphics of their games and this desire for good looks runs deep. “I think the French in general care a lot about aesthetics: the way they decorate their homes, the way they present the table for dinner, their architecture or art,” says Coktel's former PR boss Emma Kreuz.



USE OF TECHNOLOGY

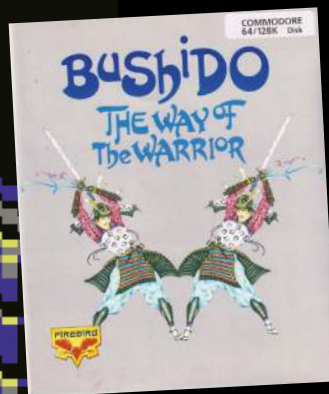
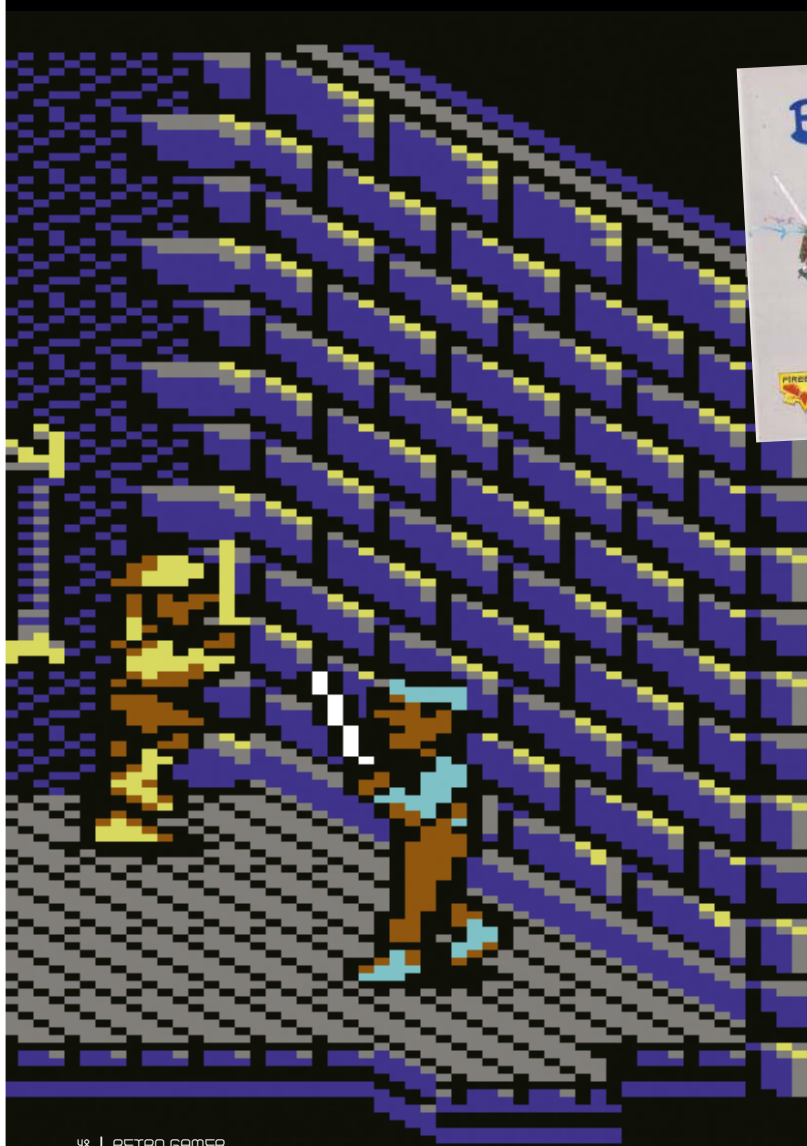
■ Although Coktel began by making games for the Amstrad CPC and Thomson machines (France's most popular 8-bit systems), it moved with the times and took advantage of the technology at its disposal. *Inca* was set in a 3D environment while *Lost In Time* used FMV. *Inca* was even distributed in demo form on BBS systems.

THE MAKING OF: BUSHIDO

THE WAY OF THE WARRIOR

Rather than fulfilling a contract with a halfhearted effort, Steve Turner combined aspects of *DragonTorc* and *Ranarama*, and a feudal Japanese setting. Steve tells *Retro Gamer* how *Bushido* became Graftgold's last original Commodore 64 title

Words by Rory Milne



IN THE KNOW

- » PUBLISHER: FIREBIRD SOFTWARE
- » DEVELOPER: GRAFTGOLD
- » RELEASED: 1989
- » PLATFORM: C64
- » GENRE: ADVENTURE



In truth, Graftgold founder Steve Turner would have preferred to have shifted focus to 16-bit development by 1989, but a contract with Firebird Software required his firm to devise one last 8-bit original, which Steve chose to set in the Far East. "*Bushido* was us trying to fulfil our contract," the developer remembers. "It started off with exploration and collecting things, but then I wanted to try to get it more current, and there were some karate games around, so I thought: 'Let's set it in Japan.'"

But far from a straightforward martial arts game, Steve planned an adventure title with an involved backstory based around the warriors of ancient feudal Japan. "I put in all of the scenario, but I made it a lot more arcadey than I first intended," Steve concedes. "I was kind of thinking of *Avalon III*, and I was going to put far more of an adventure trail in, but my staff said that it wasn't right for the Commodore 64 market."

But despite taking his lead from the arcades, Steve gave the guards manning *Bushido*'s enemy fortress quite sophisticated tracking abilities. "If you



» [C64] The copper wand enhances the combat abilities of *Bushido*'s hero, which makes it an essential pick-up.

» [C64] After midnight, *Bushido's* enemy stronghold is haunted by the ghosts of its dead guards.



walked around you left footprints," Steve recalls, "which gradually counted down and faded away. When the enemies were patrolling and caught your footprints they followed you through the rooms, but you could get rid of them if you scooted through a room and around to double-back on your tracks."

A further innovation followed in the form of hiding power-ups and other useful items in the back walls of *Bushido's* nine fortress-based stages behind a prone-to-sleeping nightshift worker. "Graftgold's *Soldier Of Fortune* had climbing on the back walls," notes Steve, "and I wanted to use the same system. I thought it would be quite nice if you could climb all over the furniture to find things, because if you fell off and made a noise then you were going to wake the guards up."

Among the things Steve hid in *Bushido's* back wall furniture were chests containing ingredients for magic potions, which he credits to one of his earlier games. "I put the magic system in, rather like *Ranarama*, because people had liked that so much," Steve recalls. "They liked collecting things and being able to build them up with spells."

In order to broaden *Bushido's* gameplay further, Steve devised an RPGlike character development system with archetypes ranging from ninjas to samurai to warriors. "Different characters made different sounds," the developer points out, "so if you went in as a warrior and tried to walk quickly across the room you woke the whole place up. Stealth was meant to be one of the really big things in the game – so you crept around."

As well as creating sound effects for *Bushido*, Steve also came up with an innovative gameplay-responsive soundtrack. "I cut the music into little phrases," explains Steve, "and I cued those depending on what you were doing in the game. So if you were walking along a passageway and it was

all quiet, you would get nothing. Then as the action started, more instruments would come in until you got the full-blown tune."

However, the atmosphere created by *Bushido's* soundtrack proved a little too much for the game's young playtesters, as Steve reflects. "My son and his friend used to be so frightened playing the game – they were about 12 at the time. They wouldn't play it with the lights off in his room because of the tension in the game when the hero was creeping along a passageway. That was quite something – to be getting that kind of belief in a game!"

But as *Bushido* neared completion, Steve's publisher showed slightly less faith in his game's core concepts when they saw a chance of a marketing tie-in. "In New York they had 'Guardian Angels' going around the trains, and they were coming over to London to set up a similar thing," Steve says with a sigh. "So Firebird got wind of that, phoned me up and said: 'We want you to turn your game into these Guardian Angels in the underground!' But because I was near the end of the game I just refused point blank."

As a result of Steve standing his ground, *Bushido* remained set in ancient Japan and retained its magic and character development mechanics, but a lack of urgency on Firebird's part meant that Graftgold's final C64 original failed to make much of an impact. "The publishing got delayed, and by the time it got out the press didn't seem to be interested in the C64 anymore," Steve says. "They sort of pigeon-slotted *Bushido*. It was like they hadn't actually played the game; like they looked at it and said: 'Oh, here's another fighting game.'" ★

ANCIENT HISTORY

Steve Turner on the canned versions of 16-bit *Bushido*

"I always intended to do other versions of *Bushido*. I designed the game thinking it would be brilliant on the Amiga and the ST. The original name of the game was 'Destiny,' because I was thinking it would change the destiny of the company. I thought: 'I've really got to come up with something – an original game to lift the company and give us a new tranche of work.' I was thinking if I could get this all on the C64 I could prove the concept, and then get contracts to do the same game on the Amiga, PC and ST – where I could see would be the big money for it. It would have taken us on to new things, it would have been sort of like a bootstrap for the next-generation systems. But it never happened because *Bushido* just didn't sell, and so the publishers weren't interested."

ULTIMATE GUIDE



Dr Wily is trying to take over the world with his Robot Masters, and only the blue bomber can stop them! Find out how this superb sequel surpassed the original and launched a beloved series

Words by Nick Thorpe



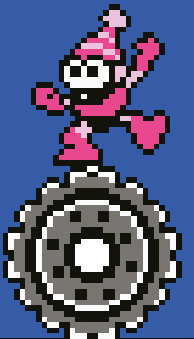
Exclusive excerpt from
100 Games To Play Before You Die
Available now from
myfavouritemagazines.co.uk

If you ever need to convince someone that second chances are worthwhile, *Mega Man II* might just be the perfect piece of evidence.

It seems crazy to imagine now that Capcom's blue bomber is a beloved fixture of the gaming world, but the original *Mega Man* (or *Rockman*, in Japan) was not a particularly successful game, despite earning some critical praise. In fact, sales were low enough that Capcom couldn't justify the production of a sequel – in fact, it was only after an appeal to management that development was permitted, and even then the team had to work on other projects.

Faced with these limitations and a short development period, the team chose not to reinvent the wheel. *Mega Man II* adopted the shooting-heavy platform game template of its forbear, which was hardly a bad thing – it had been received well, and only needed minor adjustments to captivate players. To speed development along, the team utilised unused concepts from the original game, such as enemy designs. Capcom also invited fans to send in ▶

PIEROBOT



LIGHTNING LORD



PIXEL PERFECT

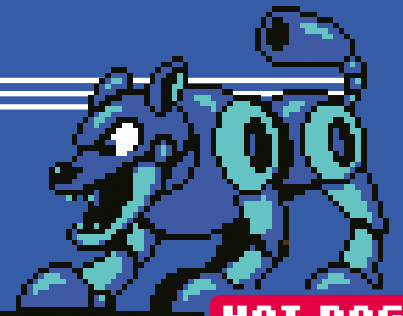


AIR TIKI



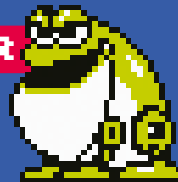
SHRIMP

MET



HOT DOG

CROAKER



SNAPPER



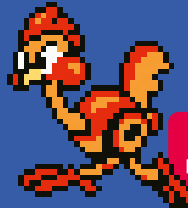
BUROKKII



FLYING FISH



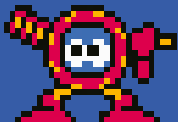
ATOMIC CHICKEN



CRABBOT



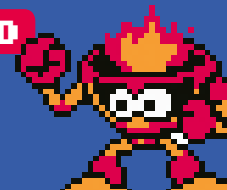
CRAZY CANNON



BUBBLE BAT



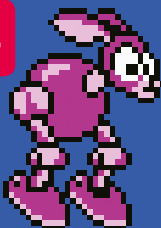
HOTHEAD



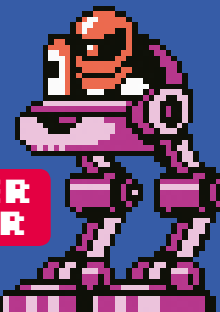
SPRINGER



ROBO RABBIT



SNIPER ARMOR



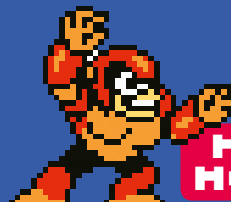
LANTERN FISH



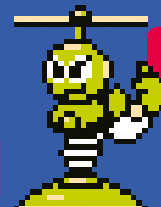
FAN FIEND



MECHA MONKEY

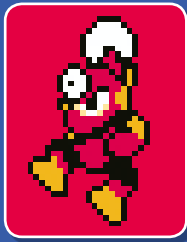


PROP TOP



BOSS RUSH

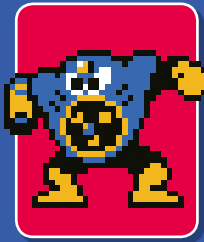
In order to get to Dr Wily, you're going to have to get past his hand-picked guardians – and he's picked quite a few...



METAL MAN

■ This boss hangs out in a factory, and loves to throw circular blades to chop his opponent down to size – and unfortunately, that means you.

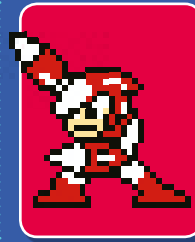
HOW TO BEAT HIM If you get in close, he'll leap to the other side of the screen making his blades easy to dodge. Shoot him as he lands – easy.



AIR MAN

■ This windbag uses a fan to generate mini-tornado attacks. These can be pretty hard to dodge, so he's more than just hot air.

HOW TO BEAT HIM Air Man attacks a set side of the screen. Once you've dodged his barrage, he'll move and you can attack him from behind.



CRASH MAN

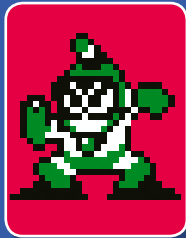
■ You might expect this guy to glitch the game, but he's actually a mad bomber with a real appetite for destruction – a truly dangerous foe.

HOW TO BEAT HIM Crash Man jumps and retaliates with a bomb when you shoot. We'd advise you to use the Air Shooter against him.

BUBBLE MAN

■ We're not quite sure what's supposed to be so deadly about bubbles – maybe corrosion? Still, this chap puts up a good fight.

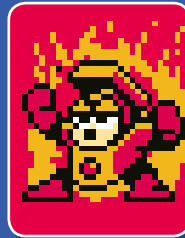
HOW TO BEAT HIM Bubble Man fires bubbles in a wave pattern, but these are pretty easy to dodge since the fight is underwater.



HEAT MAN

■ This hothead can turn himself into a shooting flame, and has a burning desire to see your energy bar go up in smoke.

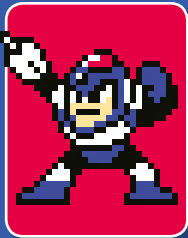
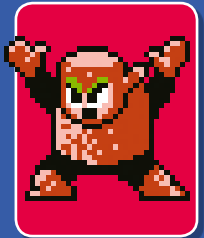
HOW TO BEAT HIM Heat Man will fire some shots, then blaze across the screen. To cool him off, we'd recommend using the Bubble Lead.



WOOD MAN

■ No, not a lumberjack – this oddball is genuinely threatening thanks to his ability to cloak himself with leaves while still attacking you.

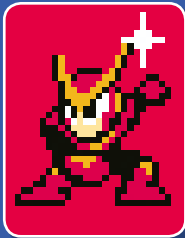
HOW TO BEAT HIM As well as shooting leaves at you, Wood Man will drop them from above. With Atomic Fire, you can take him out.



FLASH MAN

■ Thankfully, indecent exposure isn't what this Robot Master is all about – instead, he rather likes stopping time to put Mega Man on the back foot.

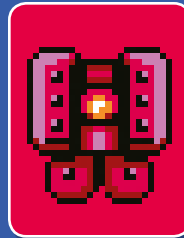
HOW TO BEAT HIM He leaps about the screen firing at you and stopping time to confound you. The flexibility of the Metal Blade is your friend here.



QUICK MAN

■ This speed freak likes to jump around and throw boomerangs at Mega Man – an odd method of attack, but one which proves surprisingly effective.

HOW TO BEAT HIM This guy isn't easy to topple, but he can be defeated relatively quickly with smart use of the Crash Bomb.



PICOPICO-KUN

■ The second line of defence at Wily's fortress. This enemy isn't big, but it comes in numbers and it only gets tougher to beat as time goes on.

HOW TO BEAT HIM Use the Metal Blade for aiming flexibility, or if you're feeling spicy, the Bubble Lead will inflict a one-hit kill.

GUTS TANK

■ Boss three in Wily's defensive line is this lumbering thing. It shoots projectiles from its mouth and releases enemies from its chest.

HOW TO BEAT HIM The Quick Boomerang is probably the best weapon to use here. To damage Guts Tank, you need to attack its head. You might wish to stand atop the tank's treads before jumping.



BOOBEAM TRAP

■ The most unusual boss in the game, consisting of wall-mounted laser cannons, and one of Wily's final traps.

HOW TO BEAT HIM Strategy is needed here. You have seven Crash Bombs, and you need all of them – two to destroy walls, and five to destroy the beam cannons. Don't waste your ammo!



MECHA DRAGON

■ The first guardian of Dr Wily's lair is this large and rather terrifying piece of flying, fire-breathing machinery.

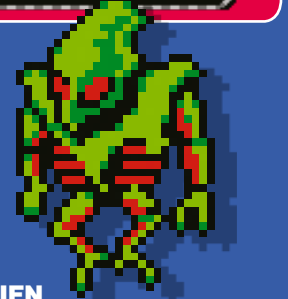
HOW TO BEAT HIM Don't bother attacking until the dragon has stopped chasing you. Once you're one-on-one, you can use your regular arm cannon to defeat it – just time your jumps well to avoid the fireballs it shoots.



WILY MACHINE 2

■ The mad doctor himself joins the fight!

HOW TO BEAT HIM For the first part of the boss fight, use fully charged Atomic Fire shots. The second form of the boss is immune to Atomic Fire, but still vulnerable to Crash Bombs. If you don't have any left, try the Air Shooter or Metal Blade.



ALIEN

■ Could Dr Wily have been an impostor? It appears so as he transforms into the Alien, Mega Man's final foe. It flies about in a figure of eight pattern.

HOW TO BEAT HIM Only the Bubble Lead will damage the alien. Not only are the other weapons ineffective, they'll actively hinder your efforts by refilling the alien's health!

“ A non-linear structure might not seem like a big deal, but it wasn't common in the Eighties ”

► their concepts for Robot Masters – the mechanical bosses of the *Mega Man* world – and used tweaked versions of those in the game.

The setup for the game is simple. Following his defeat in the previous game, series antagonist Dr Wily decides to regroup and take out Mega Man. However, instead of taking over other robots, this time Wily has built his own Robot Masters: Air Man, Bubble Man, Crash Man, Flash Man, Heat Man, Metal Man, Quick Man and Wood Man. The benevolent Dr Light sends Mega Man off to defeat them, and put the dastardly Wily back in his place.

Each of the eight Robot Masters has a level which fits their overall character – Metal Man's stage is an industrial area full of conveyor belts and mechanical hazards, whereas Air Man's stage requires you to negotiate sky-high moving platforms over bottomless pits. Likewise, Bubble Man's stage dips underwater and Quick Man's stage is filled with hazards that strike suddenly. The end of each stage involves a showdown with the boss, and victory allows you to claim a cool new power-up. Since *Mega Man II* inherits a nonlinear structure from the original, you can choose to tackle these stages in any order.

In today's environment of open world, open-ended games, a nonlinear structure might not seem like a big deal, but it wasn't at all common in the late Eighties. What's more, it was a blessing – *Mega Man II* is quite difficult, but the challenges are varied. You can choose to prioritise what you're good at if you're more skilled at certain tasks, such as precision platforming or combat. Alternatively, you can tailor your style to the power-up rewards you get for beating bosses – with the right weapon, you can tear the Robot Masters to shreds in a matter of seconds, making this a very viable ►



► [NES] Things can get hectic when enemies like the Lantern Fish spawn new enemies of their own.

MEGA SPEEDS

This speedrunner, known on Twitch and Twitter as cyghfer, can beat the game in just 26:37!

When did you first encounter *Mega Man II* and what did you think of it?

I knew of *Mega Man* as a kid, but since I started having an impact on our household's videogame purchases during the N64 era, it wasn't a series that was really on my radar. It was much later, during a period of exploring NES games via emulation, that I played through all six NES *Mega Man* titles. *Mega Man II* definitely made the biggest impression on me.



What makes the game well-suited to speedrunning?

Mega Man II is a game with simple movement on the surface but a wealth of deceptively difficult tricks when you attempt to push the game to its limit. The most fundamental trick used to progress quickly through the game is the horizontal zip, where you manoeuvre Mega Man into a ceiling in one of several ways and then kick off a sequence where Mega Man moves rightward one tile per frame – that is to say, very fast.

One of the other main attractions of the *Mega Man II* speedrun is its varied and interesting set of boss fights. Almost every Robot Master fight in the game requires interesting and difficult movement to take down optimally, or to react favourably to a wide array of random patterns. *Mega Man II* is among the most competitive speedruns from the 8-bit/16-bit era, and it is a game that demands persistence and rigor from the player.

How much practice have you put in to reach your personal best of 26:37?

I would estimate that my total amount of time put into the *Mega Man II* speedrun is around 2,000 hours, give or take 500 in either direction. This includes initially learning the game, investigating possible strategy and route improvements, practicing the game, and doing runs. Probably around 40 per cent of that consists of practice.

What are the common stumbling points when you're trying to put together a run?

The most notable sections in the run where run-ending mistakes occur are the 'open air' section in the Air Man stage, the start of the Crash Man stage, the three screens with the fire-breathing dogs in Wood Man, the major tricks in Wily 1, and many screens in Wily 4. However, there are many more spots that won't usually outright 'kill' a run, but where significant mistakes still occur frequently: the rest of the Clash Man stage, the Quick Man stage fight, the 'item-2 zip' in the Bubble Man stage, more spots in Wily 4, and many spots in the Wily 5 refights. Really, the run can die anywhere.

Do you think there's much scope for improvement on your time, and do you plan to try beating it?

A few years ago, these kinds of times would have been considered nearly unbeatable, and all competition would have more or less died out barring significant new strategy discoveries. However, our collective level of consistency and knowledge has risen to the point where the frontier for a realistic time in *Mega Man II* appears to be somewhere around 26:25.

When I returned to *Mega Man II* speedrunning late last year, my best was 27:01. I pushed hard to lower my best time to the 26:37 I have today, and I needed a break from the grind. But I've come to realize that pushing myself in *Mega Man II* is one of the endeavours that gives me the most meaning and joy in life.

POWER-UPS

You'll need some help to beat Dr Wily, and these pick-ups prove to be just what you need

ITEMS



EXTRA LIFE

■ The most vital pick-up in a game of this difficulty! Grab a Mega Man head and you'll get an extra chance to beat the game.



E-TANK

■ Treasure these brilliant pick-ups – they'll give you a full energy bar on demand, which can be as good as an extra life.

ENERGY REFILL

■ These come in two sizes – pellets refill a small amount of energy, while capsules give you a bigger boost.



WEAPON ENERGY REFILL

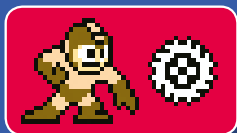
■ Much like the energy refills, but for the weapon you're currently using.



WEAPONS

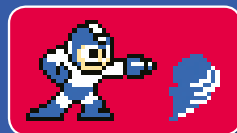
METAL BLADE

■ Not only does this absolutely shred a number of bosses, it allows Mega Man to fire in various directions, making it an outstanding weapon.



AIR SHOOTER

■ This tornado attack is great for taking out airborne enemies, as it rises up diagonally once it's been fired. It's situational, but good when necessary.



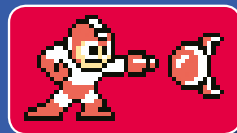
ATOMIC FIRE

■ This weapon allows you to unleash a powerful charged shot that can devastate enemies, but beware: charged shots require extra energy.



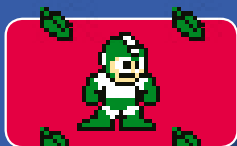
CRASH BOMBER

■ This works as normal if fired straight at a baddie, but it can attach to walls and other objects for a delayed explosion, which is useful.



LEAF SHIELD

■ This weapon encircles Mega Man in protective leaves, blocking most minor attacks, and can be hurled at enemies once used.



TIME STOPPER

■ This one does exactly what it says on the tin – time is frozen, and any nearby enemies along with it. You can't attack while the Time Stopper is working, though.



ITEM 1

■ This allows Mega Man to create a temporary platform that floats gently upwards for a few seconds. Up to three can be used at once.



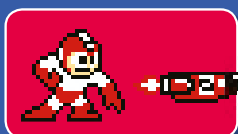
BUBBLE LEAD

■ A bubble arcs out of your cannon and travels along the floor, damaging whatever it comes into contact with. Good for hitting tiny enemies.



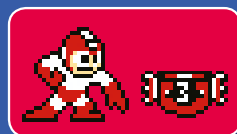
QUICK BOOMERANG

■ Useful in close-quarters combat, due to its limited range. When fired, a barrage of pink boomerangs appears.



ITEM 3

■ This item gives Mega Man the ability to create wall-climbing platforms – less useful than the other two, but situationally excellent.



ITEM 2

■ Item 2 enables Mega Man to create a platform which rockets off in the direction it's facing after a moment to allow Mega Man to get on.

► strategy. This only lasts so long, though – once the Robot Masters are taken care of and Mega Man is fully powered up, your final challenge is a linear run through Wily's lair on the way to the ultimate fight.

The one major complaint that many players had about the original *Mega Man* was that it was too difficult. *Mega Man II* includes a number of features to reduce the frustration factor. Perhaps the most important is the E-Tank, an iconic item that can be picked up and used later to fully restore energy – a literal lifesaver when used judiciously, and the only way to gain energy during a boss fight. Then there are Item 1, Item 2 and Item 3 – dull names for sure, but they allow for the creation of platforms that can allow Mega Man to skip past tricky parts of stages, and access otherwise unreachable items. Further still, the international release has a difficulty setting which reduces the resilience of enemies compared to the Japanese games. It's still not an easy game, and some sections remain infuriating, but it's certainly far more reasonable than the original.

That reduced frustration allowed players to more easily appreciate not only playing the game, but the sights and sounds along the way – and they were

special in their own right. The series' signature cartoon graphics are best expressed by the larger sprites, but even the relatively small ones like the Robot Masters are packed with personality. As for the music, the tunes are amongst the best conjured from the NES – high energy, memorable ditties with an upbeat feel that matches the on-screen action well. These have inspired a huge number of fan remixes and covers, and are frequently cited when discussing classic videogame music.

Mega Man II was released in Japan in December 1988, and like its predecessor it was popular with the critics. *Famitsu's* four reviewers gave scores of 6, 7, 8 and 7 for a total of 28/40. Western reviews were more enthusiastic, though. All four reviewers in *Electronic Gaming Monthly* offered the game 8/10 when the game arrived in the US in mid-1989. When the game finally arrived in the UK at the beginning of 1991, reviewers were even more effusive in their praise.



» [NES] Good tactics are essential to beating the bosses, including correct weapon selection.



“ The Mega Man series as a whole owes its continued existence to Mega Man II’s success ”

CVG offered the game 95%, and *Mean Machines* also gave it 95%, with reviewer Jaz Rignall commenting that it was “one of the finest platform games ever seen.” Zero rated the game 96% and gave a Console Classic award, stating that it has “playability just coming out of its ears.”

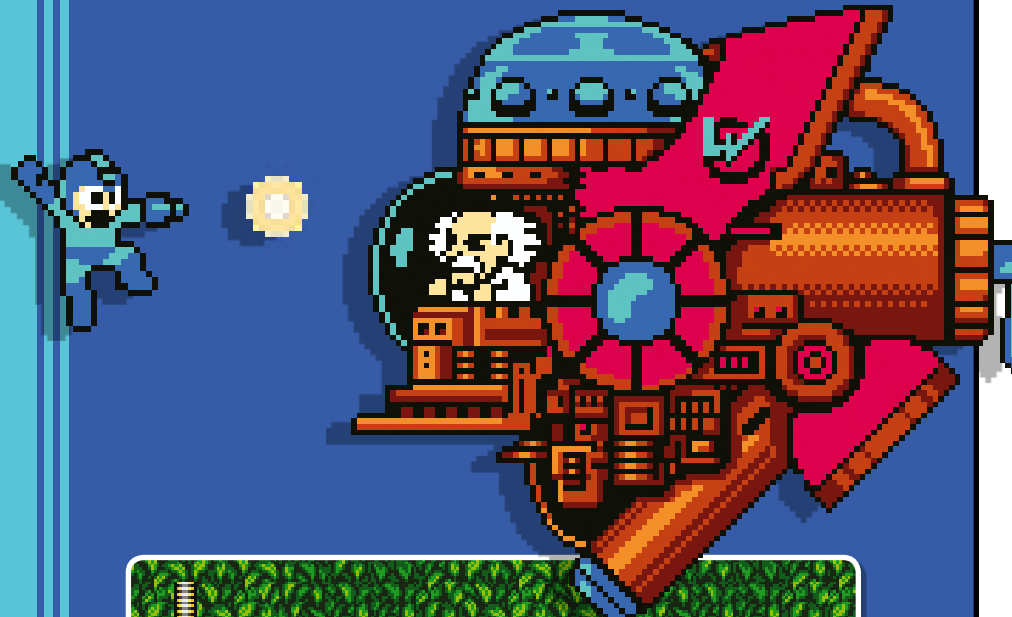
This time around though, the sales were there to match. *Mega Man II* would ultimately sell 1.51 million units, making it one of Capcom’s best-selling games ever at that point in time. Only one Capcom NES game sold more copies (that being *Ghosts ‘N’ Goblins*, with 1.64 million units), and it remains the best-selling game in the *Mega Man* series – but that’s not for a lack of releases, as Capcom’s mascot has starred in literally dozens of games since.

The *Mega Man* series as a whole owes its continued existence to *Mega Man II*’s success – had sales once again failed to meet expectations, that would have been it for the blue bomber. Yet with only some small tweaks, the team was able to follow a struggling game into a smash hit, which is something all too rarely seen today. The result was that *Mega Man* would make four more NES appearances, sticking with the 8-bit platform up to 1993 and creating an unbreakable association in the process – so much so that *Mega Man 9* and *Mega Man 10* went back to the NES style despite being developed for the Wii, PS3 and Xbox 360. As for *Mega Man II* itself, it has been featured in the *Mega Man Anniversary Collection* and *Mega Man Legacy Collection* compilations, making it easy to track down today.

So if you’re already a fan, by this point you’ve probably got a hankering to negotiate the deadly spikes of Bubble Man’s stage again already. But if you’re not a fan, or you’d previously dismissed the game for its admittedly stiff challenge, it’s well worth giving the game another chance. After all, we wouldn’t be talking about this if second chances didn’t lead to good things, would we? *



» [NES] We used to like rabbits, until this one started firing carrots at us.



THE WILY WARS

Mega Man II was given a complete overhaul to appear on the Mega Drive – does it still hold up?

While the SNES was receiving brand-new *Mega Man* experiences in 1994, Sega fans who hadn’t yet been acquainted with the character needed to be brought up to speed. As a result, Capcom created *Mega Man: The Wily Wars* (or *Rockman Mega World* in Japan), a compilation containing enhanced remakes of the first three *Mega Man* games and some extra exclusive bosses.

The version of *Mega Man II* in *The Wily Wars* is based on the Japanese release, which means that the difficulty is equivalent

to the “Difficult” mode in the NES game. It has been given the full next-gen treatment with completely redrawn graphics, although the arranged soundtrack seems to lose some of the energy of the original compositions. Passwords are out, and battery saves are in.

Mega Man: The Wily Wars is now an expensive and sought-after game – it’s rare in Japan and Europe, and there’s no American release as the game was exclusive to Sega Channel in this region.



Rampage

THE TROUBLE WITH LARRY

» RETROREVIVAL



» ATARI LYNX » 1990 » ATARI

If you're new to the magazine you might not know that I have a soft spot for Atari's Lynx. I don't own one anymore, but I absolutely adored that colour handheld and managed to pick up a machine shortly after its launch.

That colour screen attracted me like a moth to a flame and, just like that winged creature of the night, I eventually became burned once I realised one simple fact – I had no one to play any games with. Now that's not because I had no friends at work (I'd left school the year before the console's release) but the few school friends I had kept in touch with all had Game Boys.

Needless to say, one of the coolest aspects of the Lynx (its multiplayer capabilities) was something I rarely got a chance to use on a regular basis. That became even more apparent when *Rampage* crashed onto the system I'd always been a huge fan of the arcade game and immediately snapped it up when it was released because it featured a brand-new character: Larry, a giant rat who was exclusive to the Atari console.

Fortunately, I knew one other person with a Lynx at work, Andrew Gilbert, and he liked *Rampage*, too. We'd regularly catch up to play and would argue over who got to play Larry. In hindsight, it was all rather pointless. Larry was no different to George, Lizzy or Ralph when it came to his core abilities. Each characters' movesets were identical so we should have been happy to play as any of them. Larry was cool, though. Larry was the reason we'd spent all that extra cash when we could have settled for the Master System version (which is also excellent) and we were going to get our money's worth, no matter how many times we might bicker about it.

I've long since lost touch with Andrew, but I often think of those gaming sessions we shared with fond memories. Back then finding another Lynx owner was rarer than winning the lottery, so occasionally you'd let the Andrews of the world play as Larry, because you never knew when you'd find someone to take their place. ★



RE
V
I
V
E
D
I
N
G
S



BLUFFER'S GUIDE TO DETECTIVE GAMES

We crack out our trench coat and notepad to track down the greatest detective games in videogame history and investigate the enduring appeal of their mysteries

Words by Paul Walker-Ernig

Human beings are inexorably drawn to mysteries. We cannot resist their draw; we must follow them, we must discover what's behind them. Detective stories have long explored that fascination, piling up dead bodies, concocting conspiracies and sprinkling a few clues and suspicious characters around for us to begin to pick at the threads of a tale waiting to be told. Videogames are no exception.

1982's *Deadline* deserves credit as one of the first examples of a detective mystery delivered in videogame form. Created by renowned text adventure developer Infocom, the game places you in the role of a police detective investigating the alleged suicide of a wealthy man. Despite its rudimentary text-based nature, the key elements of the many detective games

that would follow are already there: a mystery is established for you to solve, you must collect evidence to solve that mystery and you must interrogate and, ultimately, accuse a suspect.

Deadline's Christie-esque approach of setting its mystery within a relatively enclosed area, containing a small circle of suspects, was also employed by 1986 Commodore 64 game, *The Detective*, in which you play a Scotland Yard detective who must pick out the murderer from a group of suspects wondering the McFungus estate, the twist in this case being that there is a time limit for you to solve the crime.

Alongside these titles set in enclosed spaces, there were other games broadening out and having you travel to different locations, drawing on the tradition of the hardboiled detective established by the likes of Raymond Chandler and Dashiell Hammett. Two notable early examples are 1985 Mac title *Déjà Vu* – which as well as getting ported to NES, recently got a PS4, Xbox One and PC release as part of the 8-Bit *Adventure Anthology* – and Microsphere's 1986 release *Contact Sam Cruise*. In the latter, you explore a small section of a city, solving puzzles as you follow a *Maltese Falcon*-inspired murder mystery, complete with hardboiled tropes such as the femme fatale.

Déjà Vu has a similar vibe, seeing you travel between different locations in 1941 Chicago as you try to find the culprit of a murder for which you've been framed.

Evident even in these early examples of the detective genre is a requirement to focus on story and characters. "You can't have a good mystery without good characters," says Chris Bateman, designer on



» [NES] Waking up in a bar with no memory of who you are, there are plenty of unanswered questions in *Déjà Vu*.

TIMELINE

The genre casefile, from *Deadline* to *Obra Dinn*

○ The text adventure *Deadline* is first released. The game would appear on Amstrad CPC, Apple II, Commodore 64, DOS, Osborne 1, Amiga and Atari ST.

○ *Déjà Vu* sets the template for the many point-and-click-style detective adventures that would follow, using ICOM's influential MacVenture engine.

○ Sierra's *Police Quest* series begins, spawning sequels in 1988, 1991 and 1993 before the series fundamentally switched its style in 1995 with *Police Quest: SWAT*.

1982

1985

1987



» Chris Bateman was a designer on *Discworld Noir*—one of the most fondly-remembered detective games.

Discworld Noir. "Detective stories are character-driven at some level, even if those characters are sometimes little more than archetypes. Good characters are the foundation upon which a good mystery can be made, and dialogue is how you deliver the identity of those characters, and so serves a central role." Those characters and their stories may have been somewhat basic in these early examples of the genre, but there's a clear evolution away from videogames' early arcade heritage that would go on to define the detective experiences that followed.

There are more trends evident in these early games, too. *Déjà Vu* and its 1988 sequel, *Déjà Vu II: Lost In Las Vegas*, both used a point-and-click format which has been indelibly linked to the detective genre ever since. "The mystery genre meshes so well with the mechanics of an adventure game," says Dave Gilbert, developer of the *Blackwell* series and founder of adventure game publisher Wadjet Eye, on the relationship between detective games and point-and-click adventures. "You explore, you talk to people, you collect evidence, you solve puzzles. Mystery stories are also very deliberate, slow-paced affairs, which makes adventure games a good fit."

This marriage between the detective and adventure game format has given us many of the genres most notable games and series, including Brøderbund's charming *Carmen Sandiego* series and Sierra's *Police*

» [PC] The neon urban landscape of *Blade Runner*, captured in Westwood's videogame adaptation.

» [PC]: It's a shame we'll never get a sequel to the first season of *The Wolf Among Us* now Telltale has laid off its workforce and closed its doors.



Quest, which started in 1987 with *Police Quest: In Pursuit Of The Death Angel*. The first three *Police Quest* games were designed by retired police officer Jim Walls, who ensured that they were faithful to real police procedure. This grounded approach helped it stand out from other more eccentric adventure games and allowed players to imagine themselves solving mysteries that could have been encountered in the real world. The *Carmen Sandiego* series started off with *Where In The World Is Carmen Sandiego?* in 1985 and spawned several sequels, as well as a popular children's TV show on PBS which ran for five years. The *Tex Murphy* series opted for a more outlandish interpretation of the detective genre, centred on the trials and tribulations of its titular trench coat-wearing protagonist, Tex Murphy, as he solves crimes in a dystopian cyberpunk future. The first in the series, released in 1989, was a mix of different genres, but with the 1991 sequel, *Martian Memorandum*, the game zeroed in on point-and-click gameplay. However, it was with 1994 entry, *Under A Killing Moon*, ▶

○ *Mean Streets*, the first *Tex Murphy* game, is released. In amongst car flying and shooter sections was an investigative portion that would become the focus of the series.

○ The first *Broken Sword* game – followed by sequels in 1997, 2003, 2006 and 2013 – kicks off the investigative adventures of George Stobbart and Nico Collard.

○ Two legendary detective adventures are released, both experimenting with real-time mechanics: *Blade Runner* and *The Last Express*.

○ *Discworld Noir* introduces the brilliant notebook mechanic, later to be seen in various forms in the *Blackwell* series, *Kathy Rain* and *LA Noire*.

1989

1996

1997

1999

GUMSHOE GREATS

Essential detective games to play

CONTACT SAM CRUISE

■ After getting a call from a femme fatale at the beginning of this ZX Spectrum game, you must guide protagonist Sam to solve a series of puzzles exploring a small section of the city. Sam must don disguises and avoid both the police and hostile gangsters on his way to solving the game's mystery.



BLADE RUNNER

■ The movie's strong sense of atmosphere and its neon cyberpunk style is replicated to stunning effect in this 1997 adventure. You scour crime scenes for evidence, analyse photos using the zoomable computer tech from the film, perform Voight-Kampff tests and interrogate NPCs on your way to finding which of the game's characters are replicants, which changes every time you play.



BATMAN: ARKHAM ASYLUM

■ This classic, where you step into the shoes of the superhero referred to as 'the world's greatest detective', requires plenty of brain power between bouts of combat. A keen investigative eye will reveal hidden paths that can be opened up with your gadgets, solutions to The Ridder's riddles, or simply a clue leading to the next beat in the story.



HER STORY

■ In *Her Story*, you're given access to a searchable database of police interview clips. One of the things we love about it is you're not forced down a predefined path on your way to solving its mystery, but are instead able to make leaps based on clever educated guesses, as well as through judicious jotting down of scraps of information picked up from the interrogation clips.

RETURN OF THE OBRA DINN

■ The ghost ship narrative is an evergreen mystery that's fascinated in its many incarnations from the *Mary Celeste* onwards and, it turns out, is a fantastic setting for a game. You explore the abandoned ship *Obra Dinn* witnessing apparitions of the many deaths that took place there in an effort to put together the who and why of their demises.

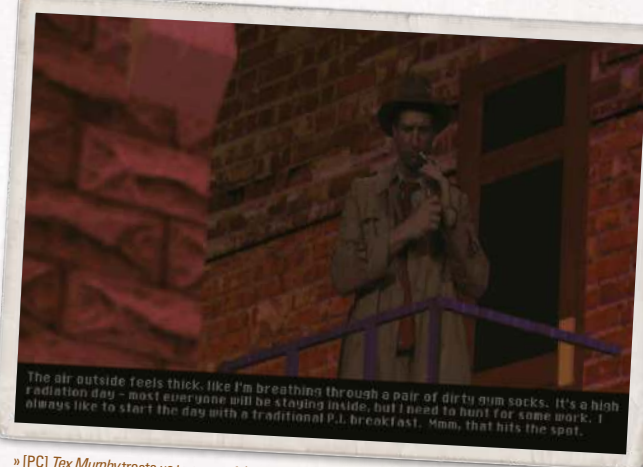


» [PC] *Broken Sword* mixed up investigations with a plot centred on historical revelations.

▶ that *Tex* really hit his stride, a \$2 million budget allowing for a cinematic presentation that included the implementation of 3D environments and extensive use of FMV cutscenes and digitised actors. *Under A Killing Moon* was followed by *The Pandora Directive* in 1996, *Overseer* in 1998 and a Kickstarter-funded comeback, *Tesla Effect: A Tex Murphy Adventure*, in 2014.

While we are on the subject of detective series, we must pay heed to history's most famous detective: Sherlock Holmes. Holmes has his fair share of titles: 1984 ZX Spectrum and Commodore 64 text adventure *Sherlock*, 1987 board game adaptation *221B Baker Street*, the FMV-based *Consulting Detective* games for Sega CD and PC, and many others. In the videogame world, however, Holmes is now most strongly associated with the series of games developed by Frogwares, starting with *The Mystery Of The Mummy* in 2002 and spanning seven more games up to and including 2016's *The Devil's Daughter*, evolving over time to incorporate a mix of different systems, including evidence collecting, moral choices, dialogue options, locked-box puzzles and more.

What is Holmes' enduring appeal? And does that tell us something about the appeal of the detective more generally? "It's probably the fact that Sherlock, while an extraordinary character, doesn't possess any



» [PC] *Tex Murphy* treats us to some of that trademark hardboiled monologue that's beloved by every PI.

○ Wadjet Eye bursts onto the scene and helps spark a revival in pixel point-and-click detective adventures with *The Shivah* and *The Blackwell Legacy*.

○ *Arkham Asylum* is released. It feels like the game with the most detective DNA in the *Arkham* series, though investigative aspects would appear in sequels *Arkham City*, *Arkham Origins* and *Arkham Knight*.

○ *Deadly Premonition* is met by a mixed reception, both praised as an art piece and denounced as a disaster. Its reputation has grown over time.

○ *LA Noire* brings the detective into the triple-A limelight, while *Gemini Rue* continues the momentum of the genre in the indie space.

2006

2007

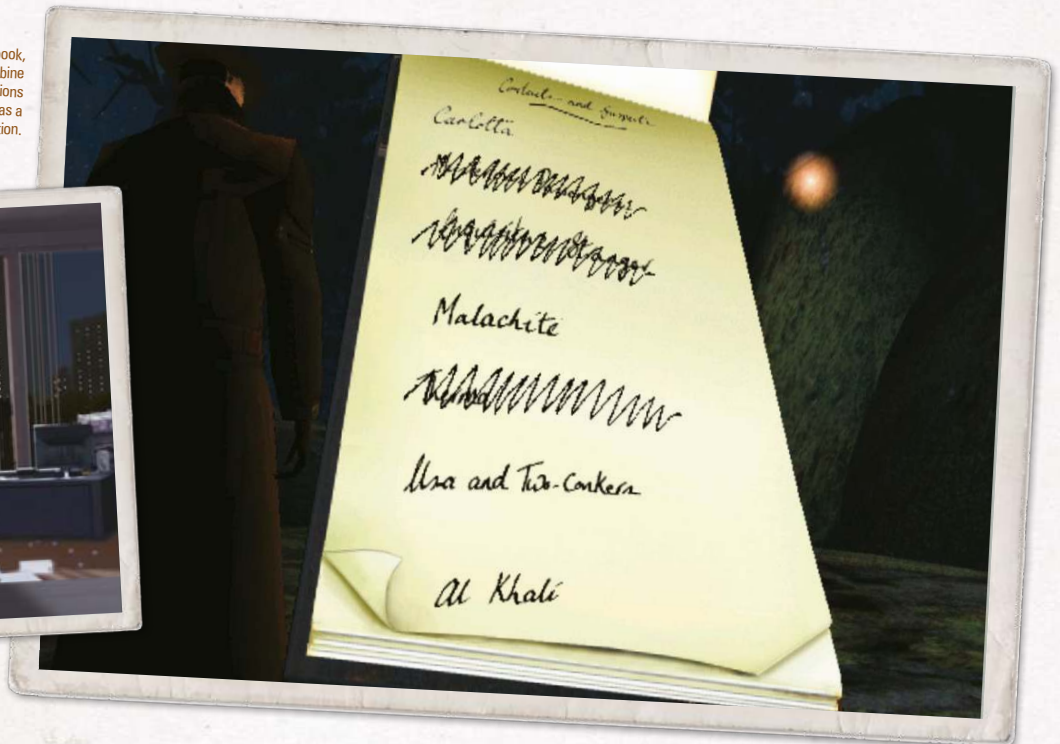
2010

2011

» [PC] *Discworld Noir's* notebook, which allows you to combine clues to make deductions and question suspects, was a fantastically effective innovation.



» [PC] Rosa and Joey help the dead move on to the afterlife in *The Blackwell Convergence*.



supernatural powers, and only relies on his wits and observation skills to crack his investigations," answers Maksym Riznyk, narrative designer at Frogwares. "When the detective explains his train of thought, it clicks for you too, and you think, 'Hey, I could have solved that as well if I were observant enough!'"

This is the aspect that Frogwares tries to capture in its *Sherlock* games. "We want to give you all the clues and hints in a very rational way, but it's up to you to put them together. I believe everybody can be Sherlock Holmes, but you need to pay attention to the same things and in the same way that he does. Everything must be logical, and with certain gameplay elements we can achieve that feeling," Maksym continues. "For example, you know how Sherlock can tell so much about a person's background by just looking at them? We have the observation mechanic for that. We also have [the] Mind Palace where you as a player connect all the dots and reach certain conclusions, much like Sherlock would."

Let rewind a moment and return to the Nineties – something of a golden age for point-and-click detective games. This is the era that gave us classic series like *Gabriel Knight* and *Broken Sword*. While neither see you play as a detective per se, and both include plenty of traditional item puzzling, both are structured as detective stories, the former a New Orleans murder mystery clearly inspired by neo-noir detective movie *Angel Heart*, the latter a conspiracy mystery kicked off by the investigation of a terrorist attack.

“Sherlock, while an extraordinary character, doesn’t possess any supernatural powers, and only relies on his wits and observation skills”

Maksym Riznyk

There are also more explicit detective themed adventures from this era. A *Blade Runner* adaptation was released in 1997, allowing us to explore a beautifully realised interpretation of the dystopian future established by the movie. You play as a Blade Runner called Ray McCoy, hunting down and eliminating replicants by searching for clues and questioning NPCs. The idea that anyone could potentially be a replicant, as established in the movie, is brilliantly reflected through a randomised system that changes which characters are replicants every time you play. It is even possible to discover that *you* are a replicant and side with your brethren, rather than with the authorities, as part of one of the games many different endings. The game further innovated with a real-time system. Other characters in the game world would be working towards their own objectives while you were investigating, rather than waiting to respond to your actions.

"We didn't want the game to be all about reaction time, but the team resonated strongly with the movie's mix of moody, slower scenes and bursts of intense action," designer David Leary explains. "Our feeling was that by including real-time elements, we could recreate that feeling in the game, too. We also wanted



» [PC] *Police Quest* may share similarities with Sierra's other series, like *Space Quest* and *Kings Quest*, but it has a more realistic feel.

the player to feel some urgency to act, and to feel like other characters in the world were making decisions that would genuinely affect the outcome of the story".

The Last Express, another acclaimed title released the same year, also experimented with real-time gameplay. You are free to roam The Orient Express to eavesdrop on conversations and interact with rotoscoped NPCs as they go about their business while trying to solve a murder.

○ Telltale brings its moral choice template to the *Fable* comic book series' story about a PI investigating a murder in a community of creatures in *The Wolf Among Us*.

○ Going indie pays off for Sam Barlow – who previously worked on *Silent Hill: Origins* and *Silent Hill: Shattered Memories* – as *Her Story* releases and becomes a big hit.

○ Indie point-and-click *Kathy Rain*, social media snooper *Orwell*, mystery thriller *Virginia* and Frogware's latest *Holmes* game, *The Devil's Daughter*, are all released.

○ Detective games continue going strong with the release of steampunk-inspired *Lamplight City* and ghost ship murder investigator *The Return Of The Obra Dinn*.

2013

2015

2016

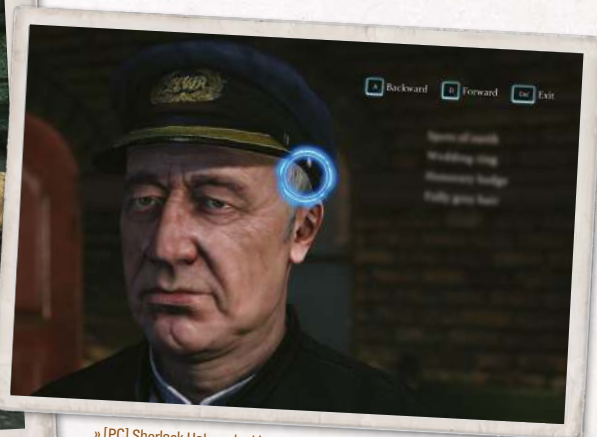
2018

» [Xbox 360]: Okay, there's a lot of punching in the *Batman: Arkham* games, but there's plenty of detective work, too.



“I saw that unresolved clues were always frameworks for future conversations”

Chris Bateman



» [PC] Sherlock Holmes looking typically thoughtful in Frogwares' *Sherlock Holmes: Crimes and Punishments*.



» Maksym Riznyk is a narrative designer at Frogwares, and has worked on its series of *Sherlock Holmes* games.

► While we're on the long-standing affinity between detective games and the adventure genre, it's worth drawing out the distinctions that can be made between detective adventures and, what we might call more traditional item-based adventure games. 1999's *Discworld Noir*, an atmospheric point-and-click that parodies the noir genre within the *Discworld* universe, is a nice example of these distinctions being brought into focus and formalised.

Designer Chris Bateman explains that after reading heaps of Raymond Chandler novels and immersing himself in noir classics starring the likes of Humphrey Bogart and Lauren Bacall in preparation for creating *Discworld Noir*, their impact was left not only on the atmosphere, characters and plot of the game, but on its structure and mechanics.

“I suppose what I really took from Chandler was his skill with using various kinds of clues as both the next step in the chain of events and as part of a wider tapestry of elements that would be pulled together when the story resolved,” Chris tells us. “I also saw that unresolved clues were always frameworks for future conversations, and this really made me think about moving away from the object inventory as the core of the adventure game for *Noir*. From the moment LucasArts changed the adventure game with the innovative design of *Maniac Mansion* and *Secret Of Monkey Island*, it was

apparent to me that what the point-and-click adventure required to work was just two core game systems: a dialogue engine, that gives the player choices of what to say, and an inventory, that structures the puzzles,” Chris continues. “Reading Chandler made me think that forcing all the clues into objects would be clunky and limit the way cases could be designed. I came to realise that, for a detective game, the dialogue engine and the inventory ought to be the same thing – the notebook that the private dick scribbles their clues into. Once that idea was settled, everything fell into place for *Noir*. The notebook was both the topics for discussion, and the things the player ‘picked up’ to solve puzzles. And because the clues were ‘objects’ in the engine, they could interact with each other – so you could click one clue on another clue and reach new realisations that would unlock new clues. I loved everything about this design, and still do.”

Detective games may well be adventure games, then, but when we think about their appeal, it is surely, as Chris suggests, not only the innate appeal of the mystery, but also the way they play around with information. Clues, witness testimony, identities, lies, plots – these are the pieces of the puzzle you are playing with. The puzzle is the story, which you uncover and structure through play.

A victim of the prematurely hailed ‘death of the adventure game’, the detective adventure experienced



EXAMINING THE EVIDENCE

What makes a great detective game?

The best detective games let you do the thinking and connect **clues** together to lead you to the next part of the mystery.

Whether it's the seedy and corrupt nature of LA Noire, or the sultry hardboiled dialogue of *Discworld Noir*, **atmosphere** is key.



Good **characters** make you care about the story being told and make dialogue entertaining as well as functional.

Exposing the truth always feels best when you're **interrogating** someone trying to outwit you and use the evidence you've collected to cut down their lies.

A good detective game needs a good mystery to get you hooked. The best give you mini-mysteries to solve, like the true identity of this troll, on your way to uncovering the big one.

some lean years during the Noughties, though there were still a few kicking around, such as the PC and Wii *Agatha Christie* games and the prolific *CSI* and *Nancy Drew* series. However, there's been a strong resurgence, kicked off by the growth of indie gaming. Prime examples of that are the retro-styled pixel art point-and-clicks released by indie developer and publisher, Wadjet Eye, starting with *The Shivah* – a point-and-click about a rabbi facing a crisis of faith investigating the murder of a member of his synagogue – and the first entry in the *Blackwell* series, which both released in 2006.

"*Blackwell* was inspired by the Alfred Hitchcock film *Family Plot*", says Dave Gilbert on the inspiration behind his supernatural detective series where the protagonists' ghostly friend Joey can be used to get information from recently deceased victims. "One of the main characters is a ditzzy medium who often calls upon her spirit guide named Geronimo. It was never established if the medium's powers were real or not, but I remember feeling bad for Geronimo who was forced to be at this annoying woman's beck and call with no way of escaping. I wanted to tell a story about a medium and a spirit guide, with the aim of ▶



» [PC] *Her Story*'s use of a computer database is a fantastically innovative and effective way of telling a mystery story.

THAT'S THE SPIRIT

David Leary, designer on *Blade Runner*, returns to his classic

Was there always a clear idea of the genre that *Blade Runner* would fall into?

Yes, absolutely. The team felt strongly from the start that an adventure game model with a detective theme was the right approach. One of our primary goals was to do justice to the *Blade Runner* property, and the movie had that strong noir/detective element that it just seemed to fit.

What were the challenges and/or advantages of working on a licensed game?

There's a tightrope you have to walk when working with a licensed property. You need to be faithful to the source material, but not so perfectly faithful that it feels like a stale retread. In addition, restrictions on a licensed property put some walls around what you can do. For *Blade Runner*, we had to be especially careful when our story interacted with the events and characters from the movie. That said, the *Blade Runner* partnership was great to work with, and gave us a lot of freedom to experiment within the licence.

Could you talk a bit about the idea behind the randomised elements of the game and how difficult that was to implement?

The implementation of the base system itself was straightforward – randomly rolling at the start of any new game for which characters were replicants, with a few constraints to make sure there were always at least some replicants. The challenge was in iteration to make sure the randomness mattered in the game

– properly setting up all the various event sequences that fell out of that initial 'roll' and finding places where the randomness could be made meaningful in a conversation or a combat sequence.

The game has an enduring reputation despite being difficult to play on modern machines. Why do you think that is?

The game respected the *Blade Runner* universe, it had some unique gameplay elements for the adventure genre, and it was fairly replayable. I don't think we knew it at the time, but we lucked into a few innovations. It had plenty of flaws as well, but we pulled off some good tricks that I think made the whole more than the sum of its parts.

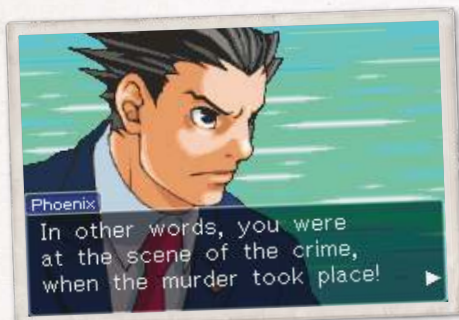
What detective games stick out as some of your favourites?

Deus Ex springs to mind – I remember how innovative that game was when it first came out. I loved it for its mix of action, story, and environments. When I was younger, I loved some of Infocom's mystery text adventures like *Deadline*, and Sierra's games. I had the great fortune to work alongside Jim Walls, one of the creators of *Police Quest*, on *Blade Runner* – it was great to be able to draw on his experience in what worked and what didn't in the genre.



WEIRD DISCOVERIES

Quirky examples of the genre



PHOENIX WRIGHT: ACE ATTORNEY

■ Thanks to a bumbling police force that frequently nabs the wrong culprit, Wright ends up having to undertake his own investigations to find evidence to prove his clients' innocence. The courtroom battles where you strike down the lies in witness's testimonies are the game's highlights.

DANGANRONPA

■ In the surreal *Danganronpa* games, the twisted stuffed bear Monokuma initiates a bizarre killing game where the students he's imprisoned in an enclosed area are encouraged to murder each other. When a murder occurs, a trial is held. If the culprit is correctly identified, they are executed. If not, they are free to leave, and the others killed.



SNATCHER

■ Hideo Kojima's cult classic cyberpunk detective adventure features some elements that haven't aged well, such as the creepy option to smell female NPCs. However, its tale of mysterious body-snatching boogeymen can still prompt some intriguing thoughts on 'the fear of the other' and offer an early look at Kojima's love for breaking the fourth wall.



» [Xbox 360] *LA Noire's* face capture technology was incredibly impressive, if a little over expressive at times.

“The mystery you are trying to solve has to be just as engaging as the steps you are taking to solve it”

Dave Gilbert

► making you feel sympathy for the spirit guide. The characters of Rosa and Joey formed soon after.”

Rosa doesn't just rely on her spirit guide during her investigations. The other key tool in her locker is her trusty notebook, which gradually fills up with the clues you collect. “That was lifted from *Discworld Noir* almost verbatim,” Dave says. “It's a great way of interacting with a mystery story and I'm surprised more developers haven't used it.”

Given that Wadjet Eye almost has its own cottage industry of detective games – 2011's *Gemini Rue*, 2015's *Technobabylon* and 2018's *Unavowed* all have strong detective elements, if not being explicit detective games – it clearly knows what makes a good mystery. “A good detective game needs to juggle two stories at once: The ‘What happened?’ and the ‘What is happening?’



» [PC] A waiter welcomes you to the carriage on the Orient Express in classic real-time point-and-click, *The Last Express*.

The mystery you are trying to solve has to be just as engaging as the steps you are taking to solve it. It is harder to mesh those two things than you'd think,” Dave concludes.

Indie point-and-click detective adventures remain in a healthy place. As well as Wadjet Eye's output, we've had Telltale's comic book fantasy detective adventure *The Wolf Among Us* in 2013, 2016's *Kathy Rain*, where a young journalism student returns to her hometown to investigate her grandfather's death, also using a *Noir*-style notebook, and, this year, the Victorianlike *Lamplight City*, where takes the intriguing approach of letting you fail to pin crimes on the right person and have the story adapt to your choices.

Of course, adventure games are not the only kinds of detective games. There are a number of high-profile examples of games that have tried to infuse the detective genre with more action-heavy elements and mix it with other styles.

2009's *Batman: Arkham Asylum* is one of the towering examples of how detective elements can work in an action experience. Even when you're not explicitly performing detective work – following trails using Batman's detective vision or working on one of The Riddler's puzzles – the game benefits from structuring itself like a mystery. The Dark Knight

D4: DARK DREAMS DON'T DIE

■ In SWERY's silly and surreal title developed to help showcase the Xbox One Kinect's capabilities, you play as a detective suffering memory loss who has gained the ability to travel back in time by touching 'mementos'. He uses this power to try and track down his wife's murderer.



GHOST TRICK

■ The mystery that you must solve in *Ghost Trick* is the main character's own identity and how he met his end. You learn snippets about this mystery as you use protagonist Sissel's newfound ghostly powers to prevent other people's murders, rewinding time and possessing and animating objects to avert their ghastly fates.

moves from place to place based on the clues he uncovers at each location you visit, letting you know where to go next while keeping you intrigued about what you might find there.

2010's *Deadly Premonition* is a great example of how mystery can connect supernatural tales and detective fiction, blending third-person survival horror with detective work as you hunt a serial killer in a surreal *Twin Peak*-inspired small town. The game has gained a cult following, bolstered by a director's cut rerelease in 2013.

L A Noire represents Rockstar's attempt to situate the detective within its open world template.

Crime scene investigation rubs up against chases and gunfights in a seedy, corrupt vision of LA that draws on the style of film noir and the city's real history of crime, which forms the bases of its cases as you work your way through the Traffic, Homicide, Vice and Arson departments. The game's headline feature was a unique attempt to express one of the key elements of detective fiction: the interrogation. This was present as far back as with *Deadline*, where you could glean new bits of information by unsettling a suspect with a well-timed accusation. It's there in *Discworld Noir*, where the clues you've gathered can be used to force confessions out of shady characters. It's in long-running lawyer-themed series *Ace Attorney*, where evidence gathered through investigative sections can be used to expose contradictions in witness testimonies during courtroom battles. *LA Noire* sought to zero-in on that aspect with its expensive MotionScan technology. The idea is that actor's faces are scanned in such detail, that you can read their reactions and encourage them when they are telling the truth or call them out when they are lying. It didn't always work, necessitating some hammy, shift-eyed performances, but it's an interesting approach.

That attempt at innovation ultimately didn't pay off for developer Team Bondi, the high costs of

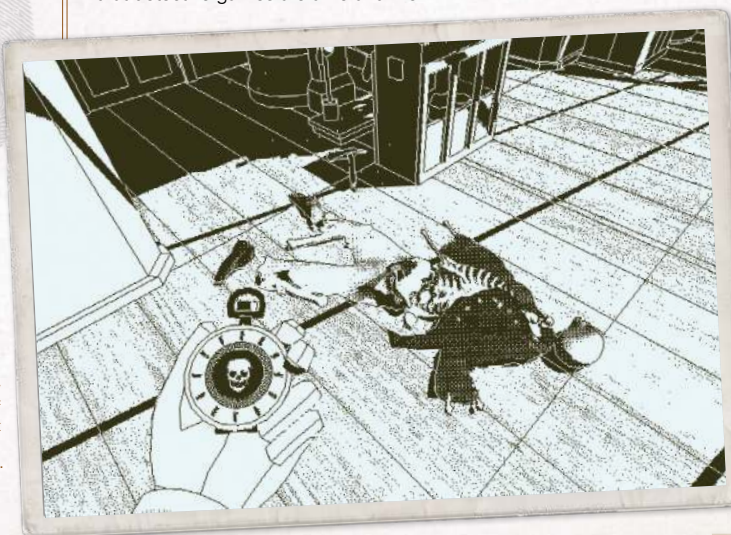


» Dave Gilbert is the founder of Wadjet Eye and is helping lead the way for a new wave of detective-themed point-and-click adventures.

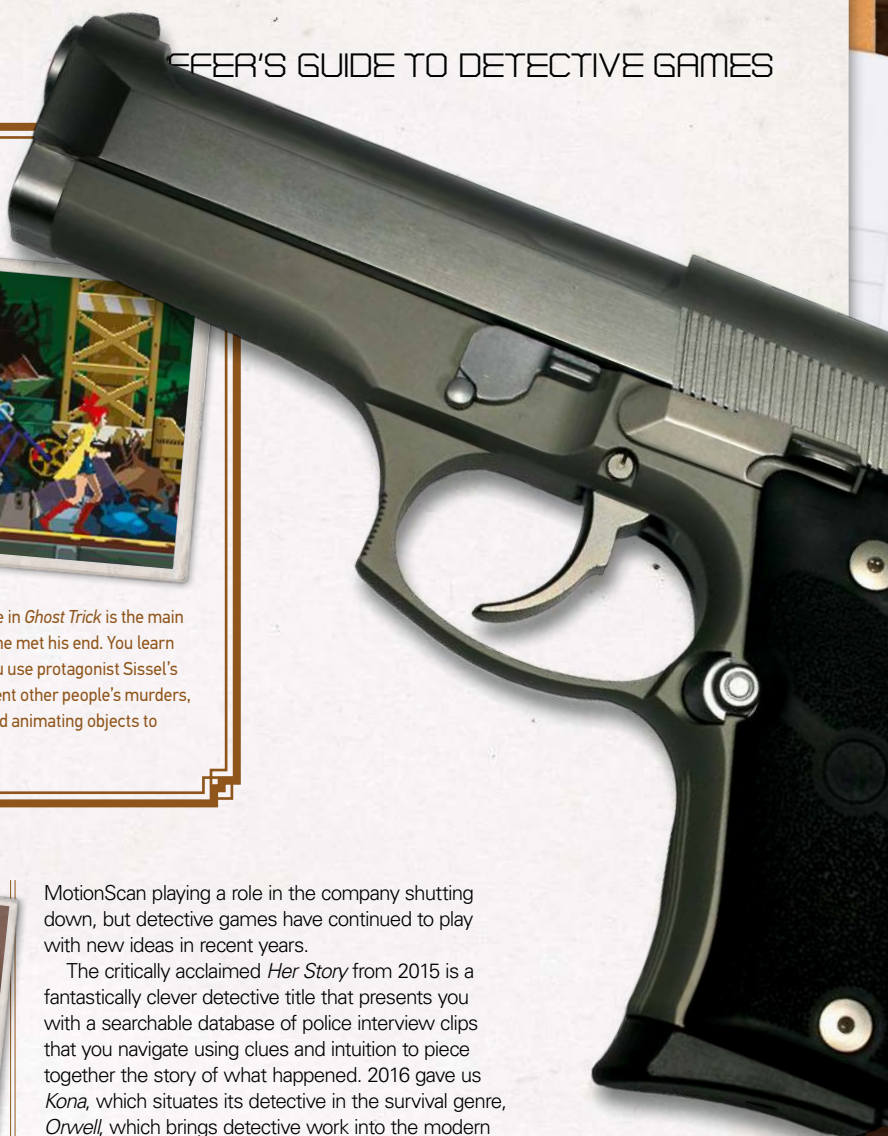
MotionScan playing a role in the company shutting down, but detective games have continued to play with new ideas in recent years.

The critically acclaimed *Her Story* from 2015 is a fantastically clever detective title that presents you with a searchable database of police interview clips that you navigate using clues and intuition to piece together the story of what happened. 2016 gave us *Kona*, which situates its detective in the survival genre, *Orwell*, which brings detective work into the modern world by having you investigate citizens through their social media interactions, and the critically acclaimed, *Virginia*, which experiments with editing in videogame storytelling, using an impressionistic approach that makes its missing person mystery more about your interpretation than solving puzzles. As recently as October, Lucas Pope of *Papers, Please* fame released a detective game set aboard an abandoned ship, *The Return Of The Obra Dinn*. You revisit the deaths of its crew members with a magic watch to try and piece together the story of their macabre end.

We can only conclude our investigation by saying that detective games are alive and well. ★



» [PC] A magic watch in *Obra Dinn* lets you replay the last moments of the dead. It's a tool that every detective would love to have.



CLASSIC MOMENTS

Bob's Bad Day

» PLATFORM: AMIGA » RELEASED: 1993 » DEVELOPER: THE DOME

Thanks to the title *'Bob's Bad Day'*, you didn't really think much about the game bearing it – after all, it sounds a bit like a forgotten Seventies sitcom. But after having seen it in a magazine, you had to get it. Not only was it an unusual action puzzle game, it was rather like *Cameltry*, one of your favourites amongst the arcade's lesser-known games. To be honest, you were just amazed that the rotation effect worked.

But it turns out that *Bob's Bad Day* isn't just a clone – it has plenty of ideas of its own, the most mind-bending of which are the gravity modifiers. Bob didn't always just fall down, you see. He could also fall left, right and upwards, depending on what you'd picked up at the time. Hence in this picture, Bob is rolling rapidly uphill, collecting coins along the way. With coins on every surface, he'll need to mess with laws of physics plenty more in order to finish the stage. Do your best, Bob! ★

BIO

At first glance, *Bob's Bad Day* seems an odd fit for publisher Psygnosis – after all, the studio made its name on graphically stunning games like *Shadow Of The Beast*. But while *Bob's Bad Day* doesn't look too impressive in static screenshots, the game's technical effects were pretty impressive in motion. With a full playfield rotation effect and transparent objects to be found, this spin on Taito's classic puzzler *Cameltry* was an impressive Amiga game. It earned some good reviews, too – 80% each from *The One* and *CU Amiga*, 82% from *CVG* and 85% each from *Amiga Action* and *Amiga Power*.





MORE CLASSIC BOB'S BAD DAY MOMENTS

Last Minute Rescue

One level begins with poor Bob plummeting towards the bottom of the screen, rushing through a line of coins towards a spinning saw – only to be rescued from the blade by a gravity reversal item. It's a tense and thrilling stage intro, and one wholly constructed from the game's regular mechanics.



Rocket Man

With the aid of one useful power-up, Bob gains the ability to lift off with a rocket thrust. No longer bound by gravity, this makes it incredibly easy to get where you need to go – but only as long as you don't face obstacles. Once you do, the action becomes tense as you straighten up before each burst.



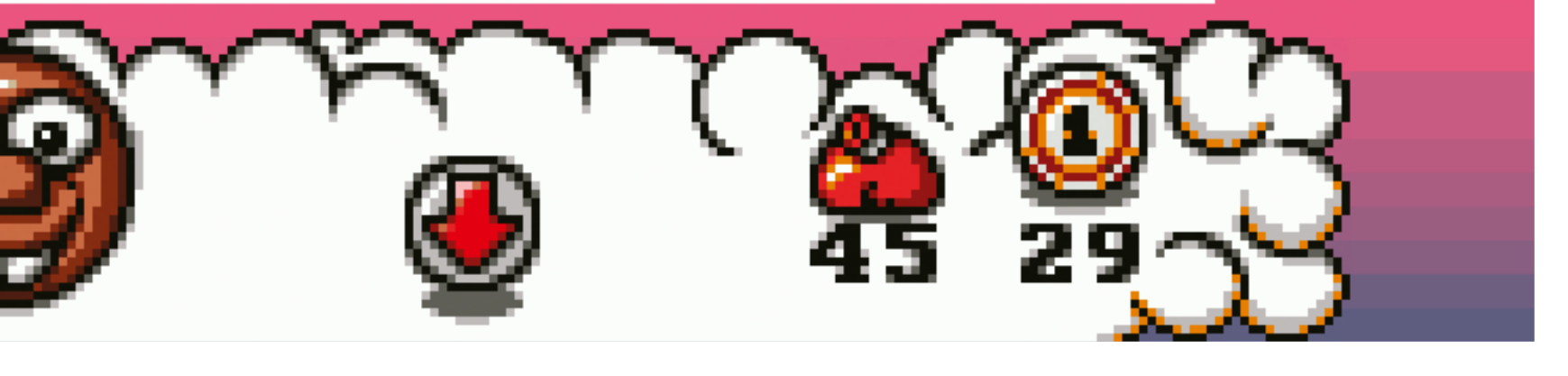
You're So Transparent

One of the cool graphical effects in *Bob's Bad Day* is transparency – a rarity on any 16-bit machine. It's not always visible, but the spinning spikes and clouds show it off excellently. It doesn't add anything to the game design, but it's these small bits of polish that help set it apart from the pack.



Lucky Escape

Just like us, Bob is always working to a deadline, and when that time limit starts floating ominously next to him it does induce a sense of panic. If you're able to keep your cool and guide our hero to the exit, you'll feel like a champion – and you should, because this isn't a tremendously easy game.



THE LEGACY OF THE

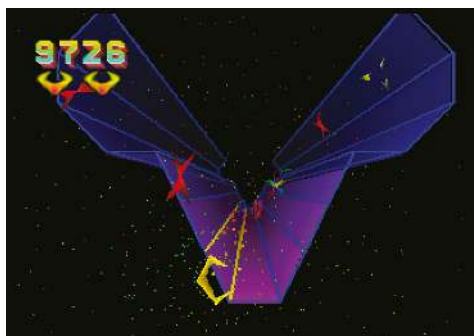
JAGUAR

When you consider the Atari Jaguar failed so badly in the retail market it caused Atari to quit the industry it helped start, it's almost staggering to comprehend the impact that it had. On the console's **25TH ANNIVERSARY** it's time to explore that legacy

Words by Kieren Hawken

We've covered the history of the Atari Jaguar on these hallowed pages many times before, so we don't want to go over that again, but a brief setting of the scene is definitely in order. Cast your minds to November 1993 where after several delays the console that was originally developed in Cambridge, England as the Flare 2 by a bunch of ex-Sinclair engineers finally arrived. The console had been hyped by Atari and the press, and Atari was promising a rebirth of the company as it re-entered the market it'd ignited with the launch of the Atari 2600 back in 1977.

Unfortunately not everything went as planned, the production delays caused by manufacturers



» [Jaguar] Regarded by many as the Jaguar's best game, *Tempest 2000* was recently resurrected for the modern age in the form of *Tempest 4000*.



» Jason Kingsley's studio, Rebellion was behind the critically acclaimed *Alien Vs Predator*.

IBM had not only pushed the launch much closer to Christmas than Atari had initially wanted, but also left it woefully short of inventory. This meant the California-based company was only able to release the console into two test markets. New York and its own back yard of San Francisco where it sold out in a matter of days.

Darryl Still and his team at Atari Europe had managed to build up impressive preorder numbers of over 2 million units, only to be told that they were only getting 2,000 units for the UK launch party at Hamley's and would have to wait until the following year for a full-blown rollout. By then it was too late, the gaming press had got bored of waiting, and the announcement of the upcoming Sega Saturn and Sony PlayStation had left consumers holding onto their pennies. Atari was determined to carry on, though, and despite the writing already being on the wall, it lasted out until 1996, and, ultimately, we're glad it did, because from the clutches of failure came a legacy that is unmatched by other failed consoles.

We all know that a console is nothing without games and one of the chief criticisms aimed at the Jaguar over the years is that it just didn't have enough of them. Neither did it have most of the big-name titles that everyone wanted. But that's not to say it didn't have any good games. Once you start to examine the Jaguar's library in more detail, you actually discover that not only are there more good games than people give it credit for, but also a pretty



» [Jaguar] The Jaguar's 'killer app', *Alien Vs Predator* was a groundbreaking title for the time.

❶ It was an office that was probably set up for 500 people, but there were about 20 people working in it ❷

Jason Kingsley

decent selection of system exclusives that can't be played elsewhere.

Atari faced a huge amount of resistance getting people to develop for the Jaguar, and then it faced even more issues when those devs discovered just how difficult it was to make these games. A poor development kit, complicated multiprocessor architecture, bugs in the chipset, Atari's reputation in the industry and a severe lack of money on Atari's behalf were all huge stumbling blocks. The latter two of these meant that Atari went about recruiting developers in a different manner, looking for young upcoming teams with interesting new ideas rather than big-name established companies.

One group was Oxford based Rebellion, which is now an industry big-hitter but it wasn't always that way, cofounder Jason Kingsley tells us about

how Rebellion got hired. "Well, it's actually a slightly bizarre story! My brother Chris and I had put together a demo of a game that involved Viking longships and dragons fighting, which one day we might return to. So we went along to Atari to pitch the demo to Alistair Bodin, who was impressed and said that Bob Gleadow, the managing director of Atari Europe should see it. So Bob came to meet us and look at the demo – in those days this was in Slough, and Atari was a shadow of its former self. It was an office that was probably set up for 500 people, but there were about 20 people working in it. So everybody had their own office and an extra office, there was tons of space everywhere, and brown Hessian wallpaper – very Seventies. Anyway, when Bob saw the demo he said, 'Wow, this is brilliant. This might work really ▶



» Frederic Houde was one of the programmers for Ubisoft's smash hit, *Rayman*.



» [Jaguar] A sequel to the Amiga and Mega Drive game, *Power Drive Rally* is one of the Jaguar's best exclusives.

KILLER HARDWARE

The components that made the Jaguar roar

1 THE 64-BIT DATA BUS

■ The heart of the system and the main reason that many followers of the consoles refer to it as being a 64-bit system.

2 2MB RAM

■ Unlike many other systems of the time this was universal rather than being separated for video, audio etc. There is also a 64-bit memory controller contained within 'Tom' CPU to manage this.

3 MOTOROLA 68000 @ 13.3 MHZ

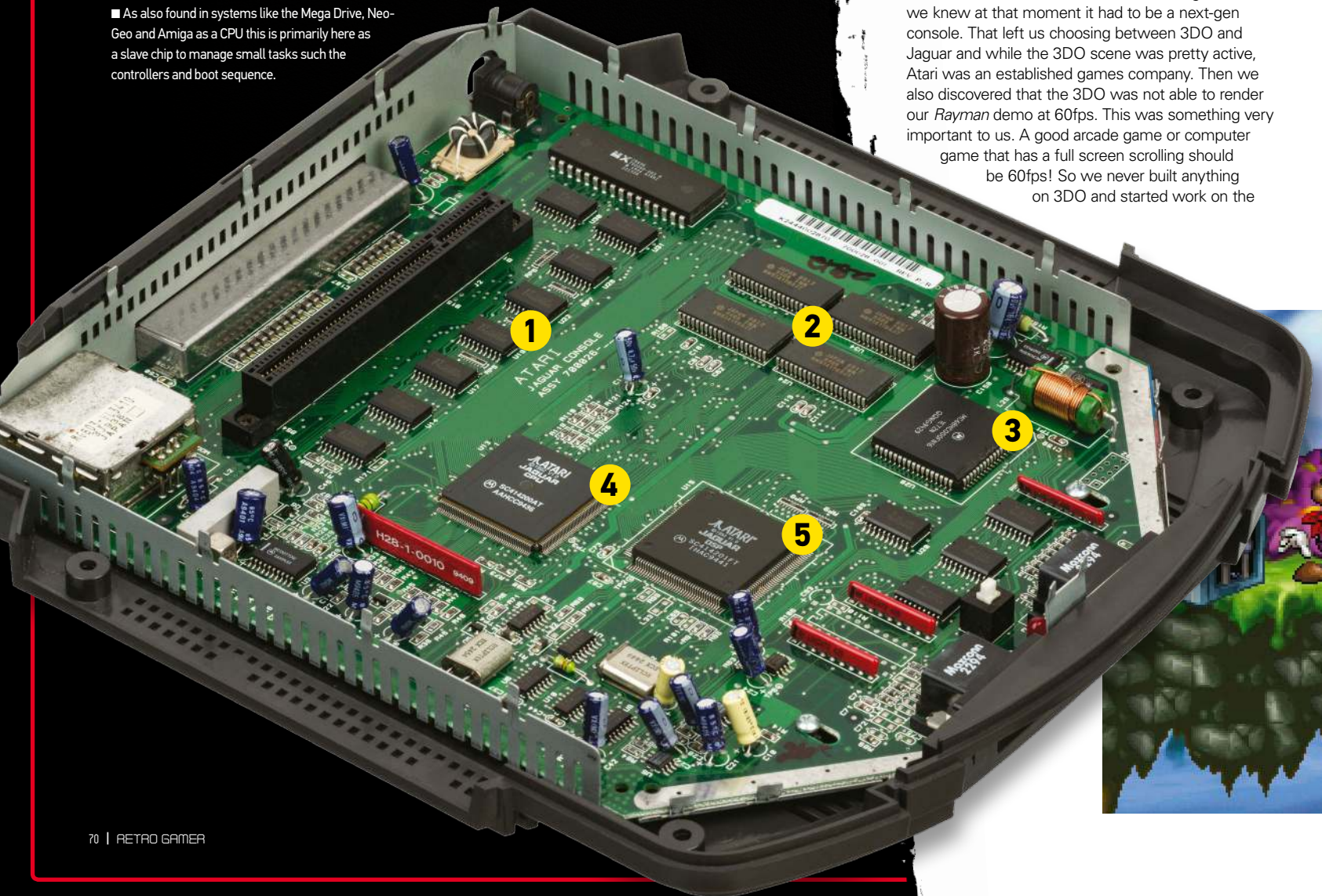
■ As also found in systems like the Mega Drive, Neo-Geo and Amiga as a CPU this is primarily here as a slave chip to manage small tasks such as the controllers and boot sequence.

4 TOM RISC CHIP @ 26.6 MHZ

■ A true example of the Jaguar's multiprocessor architecture, Tom is defined as the Jaguar's CPU and contains a 32-bit GPU as well as the 64-bit Blitter and 64-bit Object Processor.

5 JERRY RISC CHIP @ 26.6 MHZ

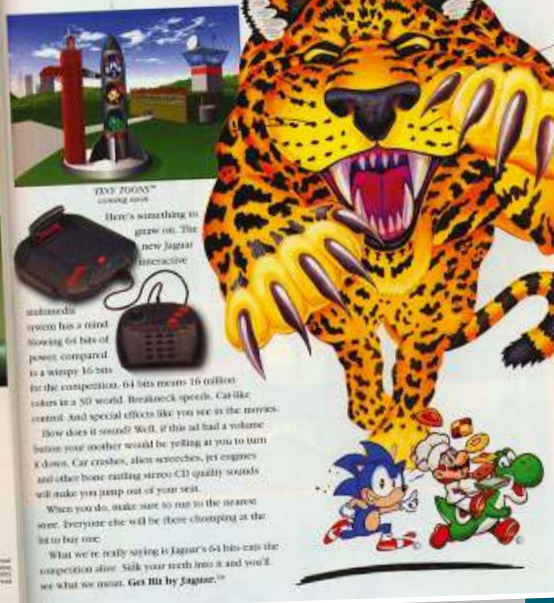
■ The Jaguar's 32-bit DSP is responsible for a multitude of tasks including audio output, UART for connection to other machines and it can also be used as multipurpose processor.



► well for our new console.' And Alistair said, 'What new console?' And that was the first time anybody else in Europe knew about the Jaguar. Chris and I were just sitting there slightly embarrassed as we realised we were there at one of those key moments in a corporation's life. It was very funny."

S mega had *Sonic*, Nintendo had *Mario* but who did Atari have? Nobody, as it turned out. But it was nearly very different indeed, as UbiSoft's Frederic Houde explains. "We started our development on *Rayman* for the Super Nintendo, targeting the new SNES CD because of the size of our game. Unfortunately it never came to be, and so we had to choose a new target and we knew at that moment it had to be a next-gen console. That left us choosing between 3DO and Jaguar and while the 3DO scene was pretty active, Atari was an established games company. Then we also discovered that the 3DO was not able to render our *Rayman* demo at 60fps. This was something very important to us. A good arcade game or computer game that has a full screen scrolling should be 60fps! So we never built anything on 3DO and started work on the

WE'RE CHEWING UP THE COMPETITION BIT BY BIT.



» Atari certainly wasn't shy when it came to aggressively advertising the Jaguar. It would turn out that Mario and Sonic had nothing to worry about.

THE LEGACY OF THE JAGUAR



Jaguar game. We showed the demo to Atari and they liked it very much and wanted us to keep it on the Jaguar only. But once Sony showed up with their PSX and lots of cash UbiSoft were left with an easy decision to make."

Whether the Jaguar having *Rayman* as its mascot would have brought success is up for debate, but the fact that the character still endures to this day shows his appeal. Sony's interest caused *Rayman* to be delayed for nearly a year, but even when it did appear as a multiformat game, the Jaguar version was very impressive. "Jaguar *Rayman* is missing some of the PSX features, such as the sliding and CD soundtrack, because of the difference in production time but it definitely came off better," Frederic says. "I remember many of horrible animations that were edited for use on the PSX and that we used less colours, it definitely didn't look as good anyway and the Jaguar version is definitely my favourite. I still think it looks amazing 25 years on!" Although it wasn't the first place he appeared, the Jaguar also got an exclusive *Bubsy*

game, another character that's recently starred in a new game.

Without doubt, one of the Jaguar's finest moments was the utterly sublime *Tempest 2000*, although it was ported to other platforms later on the original version remains the best and was the only version coded by the legendary Jeff Minter.

In fact, you could argue that the hiring of Jeff was Atari's best decision in the Jaguar years as not only did it bring us the amazing reimagining of *Tempest* but also another solid update in *Defender 2000*, as well the Jaguar's CD built-in Virtual Light Machine. That amazing piece of software produced trippy graphics in time to the music and remains one of the best reasons to own a Jaguar CD. It was later recreated by Jeff himself for both the VM Labs Nuon and Xbox 360.

We ask Jeff what his favourite memories of the Jaguar were. "It has to be the first time I let my dad play *Alien Vs Predator*" he explains before adding, "I stuck it on, gave him the controller and then turned the lights off to give him the full experience. The moment the Predator appeared on the screen he jumped so high out of his chair I thought he'd go through the ceiling!" Jeff's love for *AVP* is clear as he continues to talk about it with us for a further ten minutes. He eventually stops to tell us why the Jaguar should be remembered, and what he thinks its biggest legacy is. "The Jag should be remembered for being a console where us coders were allowed to run free. Atari pretty much let us do what we liked, which really bred creativity. I don't think *Tempest 2000* would have turned out so great without that culture. ▶



» [Jaguar] *Rayman*, this is a great example of the Jaguar's 2D prowess with over 65,000 colours displayed on the screen.



LIFE AFTER DEATH

How the Jaguar shape found a new lease of life

One of the most bizarre stories from the Jaguar's afterlife is the reuse of the moulds to create the Imagin Dental Camera. Injection moulds are fairly expensive things to produce, so not only did Atari see the value in selling them but Imagin clearly saw the value in reusing them rather than pay huge sums of money to create its own. When Imagin became aware of the interest in its creation, the manufacturer actually started selling the white cases for people to use on their own Jaguars. These moulds were then sold on to Mike Kennedy, who had plans to use them to create a new console of his own. Originally called the Retro VGS before being renamed as the fully licensed Coleco Chameleon this new system promised to bring old school games back to the masses. However, it was soon discovered that the whole thing was a sham and no actual hardware had ever been engineered.



BORN FROM THE JAGUAR

The studios that cut their teeth on Atari's console swan song



REBELLION

■ It could be argued that the rise of Rebellion is the Jaguar's greatest success story. Going from strength to strength in the world of gaming, the company is also a multimedia savant, involved in the creation of TV shows, films, books and, of course, comic books after its high-profile acquisition of the historic 2000 AD IP.



ATTENTION TO DETAIL

■ While Attention To Detail certainly didn't start off on the Jaguar, the team was previously involved in creating software for its predecessor the Konix Multisystem, ATD did create its very first game in CyberMorph. Its post Jaguar hits included *Lego Racers*, *Rollcage*, *Sydney 2000* and *The Incredible Hulk*.



MIRACLE DESIGNS

■ After creating *Atari Karts* for the Jaguar, Miracle Designs went on to do a lot more of the same thing, proving the forever-classic mantra of 'if it ain't broke don't fix it'. After *Merlin Racing* on the Nuon system the studio followed up with four more very similar mascot-style racers for the original PlayStation, including *Rascal Racers*.



► What's its biggest legacy? Well, I think it's the console that showed us there was new life in these old classics, something that very much seems to be the flavour of the month at the moment. It also had that multiprocessor hardware that allowed you to do all sorts of crazy things, it was the first system of its type in that regard." Of course Jeff's own Jaguar legacy lives on to this day with the recent release of *Tempest 4000*, a more-than-worthy successor.

One of the most important games released for the Jaguar was id Software's seminal first-person shooter *Doom*. Not only is this still regarded as one of the Jaguar's best games but it also left quite an impact behind it that not everyone seems to be aware of. Developed by John Carmack himself, it remains the only console version he worked on and was also the very first port to a non-keyboard-based system. Because of this, it also became the blueprint for all future console ports with the PlayStation, Game Boy Advance, 3DO and 32X versions being based on the Jaguar code. The man responsible for getting *Doom* onto the Jaguar was Atari USA's Jaguar product manager Bill Rehbock



» Bill Rehbock was responsible for *Doom*'s Jaguar appearance.

» An *Alien vs Predator* advert, highlighting just how revolutionary the game's concept was at the time of release.

"It's actually a pretty funny story, I had gone down to LucasArts to do a demo of the Jaguar CD and its Cinepak capabilities," he says. "After it was over one of the guys took me to the side and said, 'Hey, you've got to check out this new game called *Doom*?' It was actually Mark Haigh-Hutchinson who was the lead programmer on *Zombies Ate My Neighbours*, he's sadly passed away now but he did me a solid favour that day as I got in contact with id almost straight away.

"I flew over to Texas and showed them the Jaguar and John Carmack loved the hardware, it was his kind of crazy technology with its advanced blitter and object processor. We signed the deal almost straight away and he was great to work with. In fact, as he was getting to know the hardware he decided one weekend, when he was bored, that he would port





SHEN TECHNOLOGIES



While far from a household name, this French developer created one of the Jaguar's best games in *Super Burnout* as well as the unreleased *Stellar X*. From there Shen Technologies developed the *Adidas Power Soccer* games for Psygnosis and worked on several *Need For Speed* titles for EA.



HIGH VOLTAGE SOFTWARE



Like the aforementioned *Rebellion*, *High Voltage Software* is still going to this day and has proved its success again and again over the years. The studio also worked on more Jaguar games than anyone else, too. Everyone will be familiar with the modern titles that HVS has ported like *Mortal Kombat X*, *Injustice* and *Saints Row IV*.



“ John Carmack loved the hardware, it was his kind of crazy technology ”

Bill Rehbock



» Jeff Minter created *Tempest 2000*, arguably the Jaguar's best game.

Wolfenstein 3D to the Jaguar, too. Then he phones me up on the Monday morning and says check your server, I think there's something there that you'll like. So we wound up publishing that too!"

Perhaps one of the most surprising elements of the Jaguar's legacy is its popularity amongst developers in the homebrew scene. With more new games being released for the system month after month, there doesn't seem to be a simple reason for this. Some attribute this newfound popularity to the cultlike following it has as Atari's last console, while others speculate that it's because the machine was never truly exploited like it could have been so presents an interesting challenge.

Jeffrey Johnson of Wave 1 Games, one of the developers riding the Jaguar Homebrew scene, explains why he likes to make games for Atari's final console. "Well I didn't at first! I tried my hand at PC game development but I wasn't able to find my market there. The more ideas I came up with for the PC the more I found myself mimicking things like *Tempest 2000* and *Defender 2000*. Those games really stuck with me and are part of who I am now. Eventually after making enough weird stuff on the PC I decided to

see if there was a market for indie games on the Jag. When I found the huge community devoted to the old cat I shared some of my ideas and I quickly learned that this was the place for me to grow. Back when I had my original Jaguar in the early Nineties I was just starting to learn to code and I remember fantasising about what types of games I would make for the Jaguar if only I knew how. I never thought that one day games like *Jag Zombies* and *Fast Food 64* would actually be a reality!"

And which school of thought does Jeffrey belong to with regards to why the Jaguar gets so much support? "My guess is that most people are just hungry for more content for the Jaguar because they believed the hype back in the Nineties about it being a super beast and they still believe that today. Atari never really showed what the Jag could do, [and] they want to try and correct that." Either way, it's pretty amazing that the Jaguar has the afterlife it does after all these years. It's the console that never dies and its legacy is pretty clear for all to see. *



» Jeffrey Johnson is a well known name on the Jaguar's bustling homebrew scene.

» [Jaguar] Without doubt one of best examples of what the Jaguar can really do is *Rebellion's* *Descent*-like 3D shooter *Skyhammer*.



ULTIMATE GUIDE:

JUNGLE STRIKE

Big, brash and brutal, the follow-up to legendary isometric action title *Desert Strike* introduces more levels and more vehicles, cranking up the action to a solid 11. Buckle up, soldier – it's time to take out that dastardly madman and his drug lord pal

Words by Graeme Mason



Rleased in 1992, *Desert Strike* became an instant hit for the Sega Mega Drive. Its free-roaming game design, hectic action and impressive isometric graphics, combined with a Gulf War setting, struck a chord with console owners starting to weary of the near-constant stream of 2D platform games. Its success meant a sequel was soon optioned by publisher Electronic Arts, and the objective for its creators was clear: make this new *Strike* game bigger and more varied, with a greater disparity of levels, plus a range of shiny new vehicles for the player to strap themselves into.

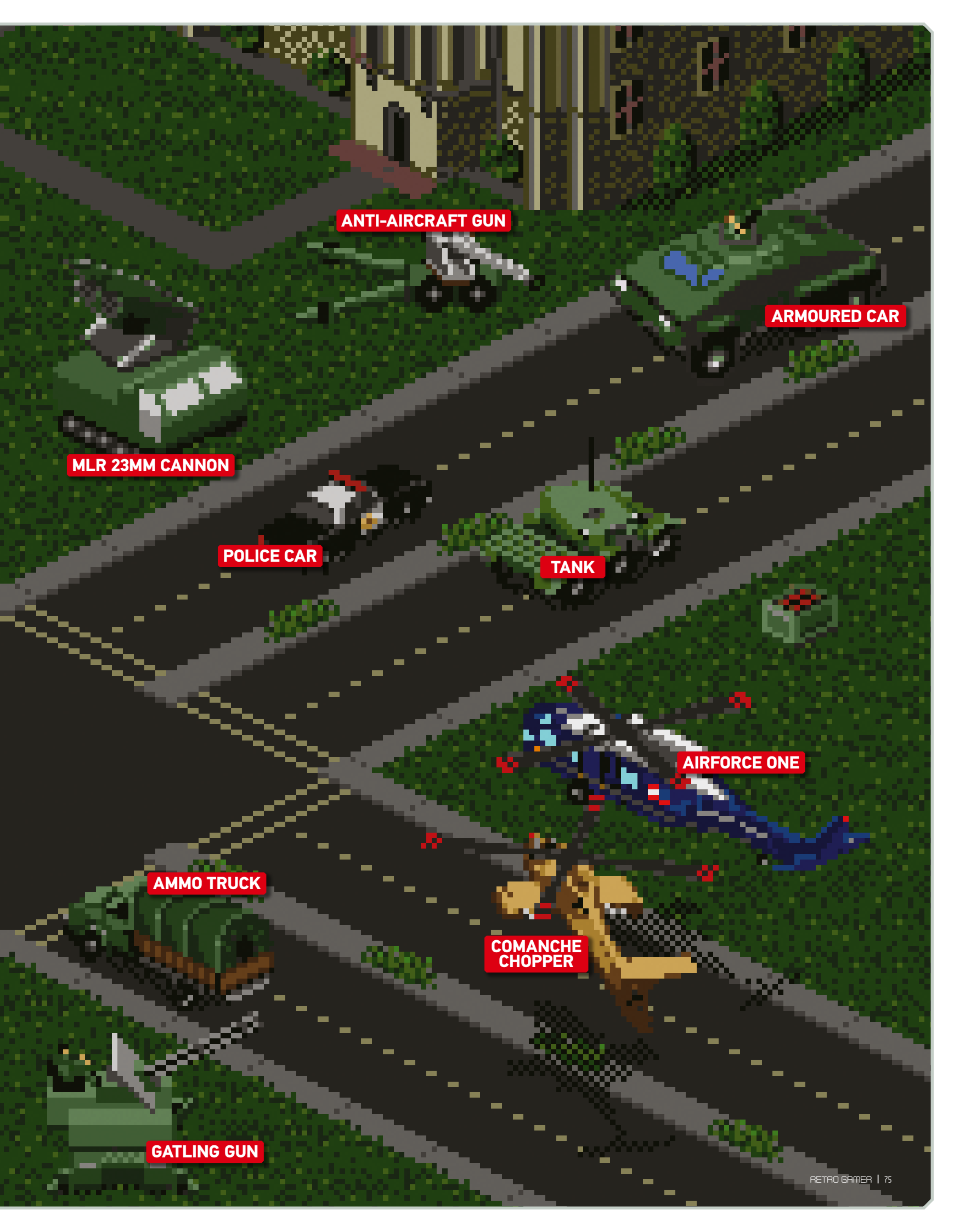
The plot for *Jungle Strike* follows on from the previous game. Having vanquished the madman of *Desert Strike*, the sequel follows the devious exploits of his son, Ibn Kilbaba and associate Carlos Ortega, a drug lord of vague South American origin. We meet the pair on an unnamed Pacific island as a nuclear explosion rocks the screen. Kilbaba wants to destroy Washington DC to avenge his dear pop; Ortega's aim is to stop the Americans interfering in his drug trade. But they haven't

counted on the helicopter pilot hero of the *Desert Strike* campaign. "Boy, these guys look familiar," the captain jokes at the White House briefing. "Ugly, but familiar."

Before taking off, the player must select their copilot. Two are available at the start (more can be rescued during the game), and each has their particular strengths and weaknesses. Except, of course, for Wild Bill, who is the king of both winchers and gunners. The first mission is set in Washington DC itself. The combined armies ▶



» [Mega Drive] Destroying the IRS building, a popular move among those who played *Jungle Strike*.



ANTI-AIRCRAFT GUN

ARMoured CAR

MLR 23MM CANNON

POLICE CAR

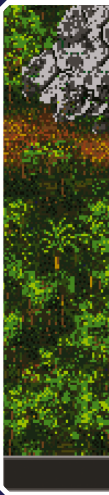
TANK

AIRFORCE ONE

AMMO TRUCK

COMANCHE CHOPPER

GATLING GUN



XL-9 HOVERCRAFT

NUCLEAR SUBMARINE

RUBBER DINGY

DOWNED F16

BEST MISSIONS

Jungle Strike's most memorable sorties



SUB HUNT

■ As early as this second level, *Jungle Strike* is throwing new enemies at the player and letting them loose in a secret experimental hovercraft. Armed to the teeth with rockets and mines, this nifty vehicle easily evades AA guns and must intercept the Drug Lord's plutonium shipments. Then, you'll need to use formidable sea mines to take out the drug lord's massive submarines.



TRAINING GROUNDS

■ It's familiar territory in level three as a barren brown wasteland lies in front of the Comanche. There are danger zones aplenty here, complete with powerful Sheridan tanks as the player must fly deep into enemy territory and retrieve a nuclear reactor from the drug lord's warehouse. Best not to accidentally shoot it, though – check your fire, pilot!



PULOSO CITY

■ With echoes of the situation occurring in real-life Somalia at the time, Puloso City is under the control of the drug lord with his henchmen holding the city hostage, and an ineffective UN force camped nearby. With the action spread out and varied (including the use of a nifty motorcycle), this is another solid mission with plenty to do... and shoot.



DANGER ZONE!

» [Mega Drive] These are appropriately labelled Danger Zones, areas protected by radar, pepper many levels. Approach with care

► of the drug lord and Kilbaba are threatening the capital's iconic monuments; destroy the enemy, and its bases before escorting a fleeing president out of the city. Rescue an informant and the location of your foe's fortress is revealed, together with the duo's insidious plans. In a somewhat alarming development, Kilbaba has acquired several batches of deadly plutonium and these must be intercepted at the coast before they are taken into the jungle.

The drug lord himself has amassed an impressive army to assist the madman; in addition to land-based vehicles and soldiers, he commands a fleet of nuclear submarines and small attack boats. But it's not all bad news. In mission two (Sub Hunt), there's a stranded experimental hovercraft to the south of the map. Taking command of this swift, yet powerful vehicle enables the player to tackle the various seaborne enemies with its rockets and, vitally, sea mines. Dishing out a hefty 1,000 damage each, these destructive floating bombs are essential for eliminating the submarines that arrive halfway through this level. Inland, the Comanche proceeds to a terrorist training camp where a nuclear reactor must be appropriated from a Kilbaba stronghold.

A seemingly simple mission, the danger zones of this map make it anything but easy. After a short cutscene, it's then off to the jungle to rescue a bunch of errant soldiers and scientists. But there's a catch, and it's a biggie. For this is *Jungle Strike's* infamous Night Mission.

Now we are never one to shy from a challenge; but the way *Jungle Strike* trolls the player in this fourth mission is something to admire and despise in equal measure.

"Beautiful night, isn't it?" laughs the American general at its commencement. And to be frank, you can't really tell, because it's totally and utterly dark. With only hydra missiles to light the helicopter's way, enemies must be located, friendlies rescued, chopper pads liberated and danger zones avoided, all while desperately searching for spare fuel drums. And be careful, pilot: hydras and fuel are an explosive combination. The terrorist-occupied stronghold of Pulosso City is up next (and fortunately it's now daytime), followed by the madman's snowy mountain retreat, and another nuclear arsenal waiting to be disposed of. The River Raid mission sees the debut of the stealth bomber, a deadly yet fragile aircraft with unlimited ammunition and fuel, before another trip to the mountains, this time to apprehend the drug lord and Ibn Kilbaba. Finally, it's back to DC, to shake the hand of the president on the front lawn of the White House. Mission accomplished, it looks like there's some welcome time off coming for the Strike captain, until there's a massive explosion in the background. Enemy forces have broken into the city and are freeing madman and drug lord. Time to jump into that chopper again.

While its levels may not always hang together completely logically, there's no doubting the breadth of ambition in *Jungle Strike*, with even the missions that take place over familiar territory varying in some way or another. As with its forbear, effective fuel management is just one of the many things a successful pilot will need to keep an eye on. Every map holds a



SUPER STRIKE

We chat to Rich Stevenson, the veteran coder behind the SNES version of *Jungle Strike*



Had you played the Mega Drive game already, and how did development begin on the Super Nintendo version?

No, the first time I played *Jungle Strike* was when we started on the conversion. It was quite messy and not straightforward. We were told we'd be sent the source code to the Amiga version, but they sent us over the *Desert Strike* source code instead. The correct ones never arrived, so we had to take a different approach to converting the game.

What was the new approach?

Simon Short was tasked with playing the game from start to finish and videoing every level, as well as covering every area of the map. As you can imagine, it was a lengthy process. Then we started working on the helicopter logic, which thankfully was very similar to that of *Desert Strike*, so the source code wasn't totally useless. Then, the graphics were redrawn, and we worked with a number of the in-house graphics team, all of whom had to watch Simon's videos in order to redraw the backgrounds and sprites.

What differences or changes did you have to make when porting the game?

With the backgrounds all recreated from the video footage, there were some changes from the original. We were also limited by the number of unique characters which could be displayed, and had to reposition some of the sprites as a result. The map editor I had previously developed helped us to identify any problems as we designed the backgrounds, and this sometimes meant deviating from the original design slightly.

You hid a number of secret messages in the game...

Yeah, a few of us thought it would be a great idea to hide some secret messages which could be accessed by entering codes. I made the mistake of leaving a screen which invited people to call my home phone for a chat, and totally forgot to take it out of the US version. The result was a lot of calls in the early hours of the morning from people calling me and shouting things like, "Yeah-haw, *Jungle Strike*, love it!" and putting down the phone. Obviously after six months of this, I decided it may be time to change my number!



SNOW FORTRESS

■ It's a drastic change of scenery as we elevate our helicopter into the snow-capped mountains and the drug lord's retreat. The first task is to rescue ace copilot Wild Bill. Once he's on board, your chain gun will sing bullets, leaving you free to take out multiple missile launchers and the madman's stash of stolen Soviet nuclear warheads.



RIVER RAID

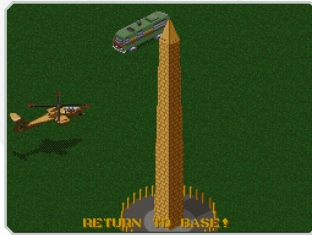
■ Snaking through this mission is the dangerous stretch of water, and next to one bend is an airstrip with the stealth bomber lying under camouflage. This is a beast to control, and extremely delicate, yet it houses some impressively destructive missiles and bombs. You're granted infinite ammo and fuel, too! Just take care to not bump into anything.

CONVERSION CAPERS

Which version of *Jungle Strike* flew higher than the others

► SNES

■ This Nintendo version was created by Gremlin Interactive which did a very commendable job, in some ways improving over its 16-bit peer. Smoother graphics and some additional nice touches (such as the slow rotor startup and screaming soldiers) make SNES *Jungle Strike* preferred by some gamers, although it plays just a shade slower than its Mega Drive counterpart.



◀ PC

■ Originally released on floppy disk, the subsequent CD-ROM PC release of *Jungle Strike* includes a range of hilariously camp full-motion video sequences and, more interestingly, a complete extra mission set in the Antarctic. Similar to level two's Sub Hunt, this features an enemy frigate that may look strikingly familiar to fans of *Desert Strike*.

► GAME BOY

■ An admirable attempt to bring the complex shooter to the monochrome screen of the Game Boy. There are plenty of visual sacrifices, as you'd expect for such cut-down hardware, and the chopper sound is irritating at best. But it plays smoothly, and the vehicle movement is as tight as you would expect, making this a decent effort for shooting on the go.



◀ AMIGA

■ After the excellent Amiga port of *Desert Strike*, its sequel disappointed on the Amiga. Looking like a straight Mega Drive conversion, the main issue is with its speed – it's comfortably the slowest Comanche of all the ones we've flown, and the decent sound FX and similar gameplay fails to make up for it. Overall, it's a disappointing effort from Ocean Software.

► GAME GEAR

■ We actually quite like this cute little handheld take on *Jungle Strike*. Sure, its resolution is predictably cramped, and the sound is notably missing in parts, yet the Comanche dances jauntily around the screen and is a delight to pilot. Far superior to the Game Boy port, it leaves us wondering what the Atari Lynx could have done with the game.



MOBILE RADAR

MOBILE MISSILE LAUNCHER

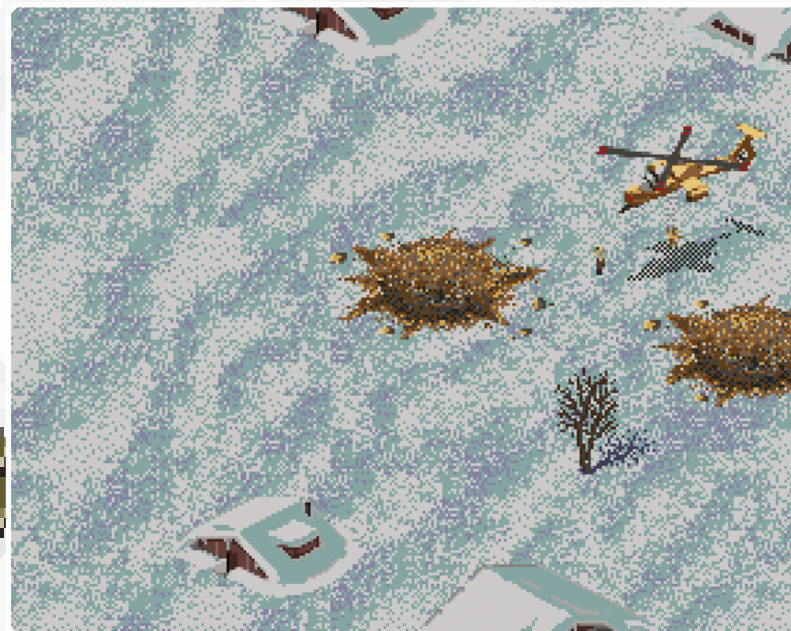
» [Mega Drive] The bad guys of *Jungle Strike* muse over their evil plans.



► limited amount of gasoline cans, and their location is not always clear on the pause screen map. Each mission also challenges the player in different ways, from rescuing dissidents and downed fighter pilots, to eliminating fleeing enemies or acquiring errant nuclear bombs. The action is presented in the same isometric view as *Desert Strike* and also uses an identical control system for the various vehicles. Despite the 3D view, the Comanche is controlled in a first-person setup, a scheme that sounds awkward, yet, as already proved, is very effective. While the hovercraft is relatively straightforward to control, the motorcycle and F-117 Stealth Bomber in particular require a completely different style of play. Constantly moving, and slow to manoeuvre, it takes skill to pilot and presents a fresh challenge just as the player might be getting to grips with the game. Ultimately, the effort in producing such an immense game was justified as producer John Manley was dubbed 'the Godfather of Strike' and presented with a ceremonial gold plaque upon selling 500,000 units.

The eventual cross-platform releases of *Jungle Strike* (including its inclusion on a PSP compilation, *EA Replay*, in 2007) have swelled this number even more, and today it is regarded by many as the finest of this long-running series thanks to the intense gameplay, tactical options and an open, explorable world. It pushed the boundaries over what could be achieved on the 16-bit cartridge-based consoles, seamlessly blending its action and storytelling, and at the same time almost creating its own unique genre. And even today, *Jungle Strike* remains a tough cookie to beat. "Good," grins the insouciant captain during his special forces briefing. "I was afraid this was gonna be easy." ✱

» [Mega Drive] The evocative snow fortress mission switches things up from the jungle setting.





SHERIDAN TANK

F-117 STEALTH BOMBER

AIR SUPPORT

We speak to John Manley, the producer behind the Strike games for EA



You presumably set out to make *Jungle Strike* bigger, better and more expansive than the original?

We wanted to take what players liked about *Desert Strike* and give them a wider variety of locations, missions and vehicles. *Desert Strike* took place in one environment, so in *Jungle* we wanted to give the player a chance to visit multiple other terrains and control a variety of vehicles and different weapons.

What was your role on the game?

I was the lead designer, and also performed as the overall game director for the franchise. This included devising specific gameplay missions to creating the storyline, and collaborating with Mike Posehn to implement the levels and new features.

The new vehicles meant new control schemes and handling. Were any of these trickier than others?

I think the motorcycle was the hardest vehicle to get right in the game, as it was initially too small to see on the road,

and it also required a control scheme that was different from anything else in the game. We toyed with letting the player drive a military truck loaded with explosives, but we abandoned the idea as it didn't really provide anything new that we couldn't already do in the game. There were a few other things, like the hovercraft pick-up. It had a smaller-than-normal collision box for picking up items due to its oblong shape. But we also gave it powerful weapons with the rockets and sea mines.

What do you think made *Jungle Strike* such a success for EA?

The freedom to go anywhere in the world, to choose your own way to complete the missions, where you could do things out of order. Another reason I think was our 'ripped from the headlines' scenarios. This made the game feel fresh and topical, while at the same time delivering a dose of pop culture and social satire. And there was our unique attitude, with the game having a nice mix of action and humour. Plus, as the Strike organisation stops wars before they happen, we always thought of ourselves as a 'peace' game!

FUTURE CLASSIC

Modern games you'll still be playing in years to come

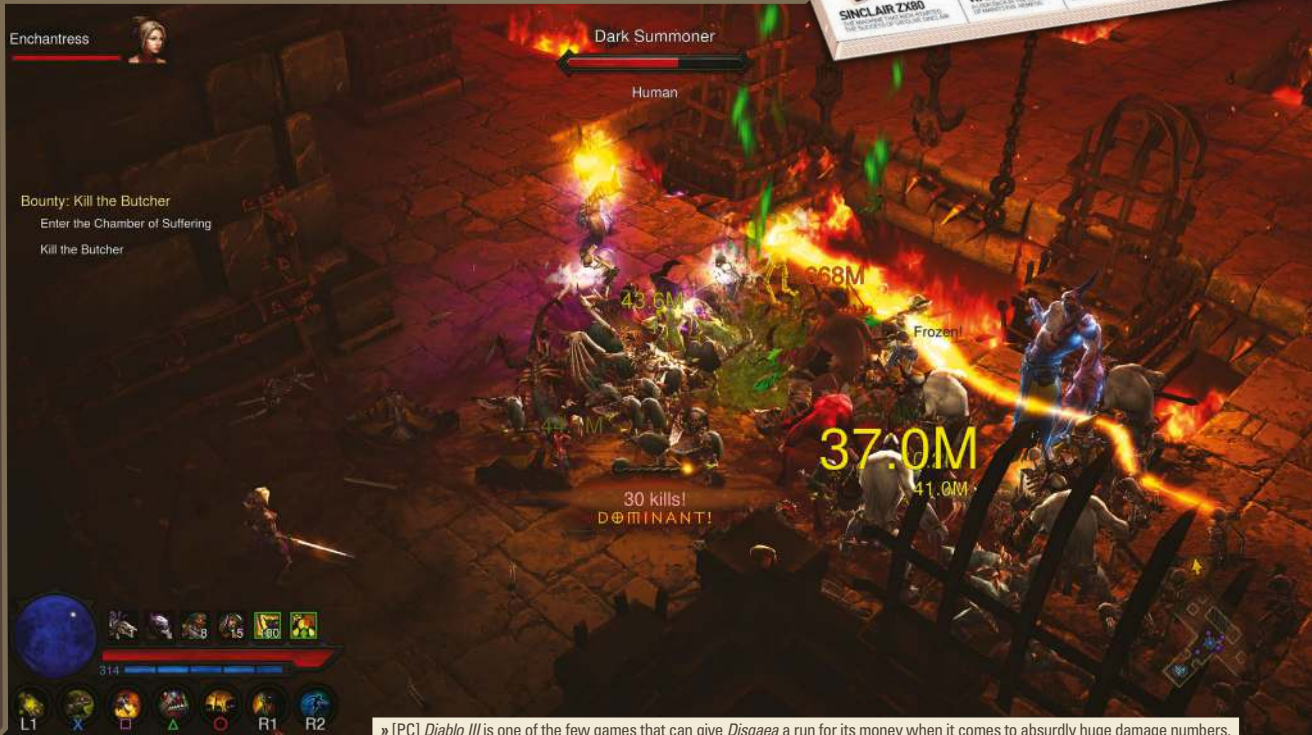


Info

- » **Featured System:** PC
- » **Also On:** Mac, PS3, PS4, Switch, Xbox 360, Xbox One
- » **Year:** 2012
- » **Developer:** Blizzard
- » **Key People:** Jay Wilson (director), Alex Mayberry (producer), Chris Metzen (writer)

Go Deeper

- » Amazingly, Blizzard is still supporting the much-older *Diablo II* as well – the last patch came out in June 2016, 16 years after the game's initial release.
- » *Diablo III* was over a decade in the making, with work starting on the project seven whole years before its 2008 announcement.



» [PC] *Diablo III* is one of the few games that can give *Disgaea* a run for its money when it comes to absurdly huge damage numbers.

Some games have 'classic' written all over them from the moment they are released, but others need time to earn that status. With the recent Switch release being perfect proof of how far *Diablo III* has come, it's time to confirm its legendary status

Words by Luke Albigés

DIABLO III

THE BACKGROUND

Following up one of the most revered action RPGs of all time was always going to be an uphill struggle for Blizzard. As with other high-profile returns of recent years like *Doom* and *Final Fantasy XV*, the game went through several iterations before the team reached something it was proud to call *Diablo*, leading to a whopping seven years of development before the game was first revealed in 2008, then a further four years of development before release. Some fans weren't overly enamoured with the art direction at first, with numerous petitions decrying the apparent shift to a more colourful palette almost reminiscent of Blizzard's other big hit, *World Of Warcraft*. Like so many similar outcries, this response was wildly exaggerated and Blizzard took it in its stride – in fact, the final game shipped with a secret level called Whimsydale in response, a cartoon world full of rainbows, unicorns and murderous teddy bears. While the game itself proved to be a solid and engaging loottfest, it wasn't until the 2014 *Reaper Of Souls* expansion that it really hit its stride, with the massive update adding several

bottomless new modes that meant that the loot grind never had to end.

THE GAME

Reaper Of Souls can be seen as the turning point for *Diablo III* – the moment it went from being a good game to a truly great one. The core game had the loot system and skill variants to facilitate many awesome character builds, but it didn't really offer that much in the way of replayable content to put those creations to use. *Reaper Of Souls* introduced a pair of solutions to this issue, namely Adventure mode and Rifts. Adventure is basically a freeplay option, letting heroes dive into any of the maps from the campaign to complete bespoke challenges and bounties. Tile-based maps mean that layouts and enemy placement differ on each visit, some variants bring with them additional missions or other chances for extra loot, while completing whole sets of tasks in each act offers yet more rewards. On top of this, Rifts take things a step further by producing unique dungeons at random from all of the game's available locations



» [PC] Gear can be appraised piece-by-piece for those who like the suspense, or in bulk using the book in any hub area.



» [PC] There are a bunch of novel hidden dungeons, from the Cow Level the loading screens tell you doesn't exist, to Development Hell where you put undead versions of the game's staff out of their misery.

Things of note

SEASONED TO PERFECTION

Season mode invites players to create fresh characters every three months or so, and chasing exclusive timed rewards.



DO YOU EVEN RIFT?

Nephalem Rifts are randomised dungeons, while Greater Rifts escalate in difficulty. Both add incredible replay value.



PRIMAL RAGE

Loot chasers will be on the lookout for rare Ancient versions of Legendary gear that have better stats, and there are even ultra-rare Primal variants that have perfect stat rolls.



WHAT'S IN THE BOX?

Kanai's Cube is a crucial part of endgame character building, letting players equip the unique perks of several Legendary items they have infused into it.



SHUTTING UP SHOP

The PC version launched with Auction Houses where loot could be traded with other players for gold or real money. After backlash, both options were axed within two years.



and monsters. The basic versions, Nephalem Rifts, are tied to your current difficulty level (the options for which were also vastly expanded in *Reaper Of Souls*) and offer plenty of shiny loot as you battle your way to the Rift Guardian, but it's the super-challenging Greater Rifts that really provide endless action and improvement. These have their own difficulty levels independent of that chosen for the rest of the game, with success within the allotted time unlocking higher tiers and potentially even greater rewards. Greater Rift 'pushing' – the act of just seeing how far through the ranks you can get – is almost a game in itself, an endless loop of slight gear improvements and gem upgrades that you can easily lose months to if you go hard on it. Pushing beyond GR60 transcends the game's maximum difficulty level, Torment XIII (which, for reference, itself ups base monster health by over 2 million per cent and enemy damage by a factor of almost 300), so only the best builds will even get to that point, let alone beyond it.

Fortunately, the game has other systems in play to help determined adventurers reach their full potential. The Paragon system is the best example of this: once you hit max level with a character, all further experience goes into an account-wide Paragon level pool with each level translating to a minuscule stat boost of your choice to help further improve your build. As these additional points rack up into the hundreds and even thousands, though, you start to see significant benefits and ones that apply to all your max level characters, making playing as one rewarding for all of them. Since each offers their own twist on the hack-and-slash action-RPG formula – Wizard and Demon Hunter play mean ranged games, Barbarian, Monk and Crusader excel in close quarters, and Witch Doctor and Necromancer have pets and status ailments do the work for them – it's great fun to bounce between them, especially in multiplayer where these roles synergise brilliantly. It's

pretty amazing that the game's performance keeps up with the mayhem with four characters, dozens of enemies, countless explosive effects going off, and loot and debris flying all over the place, but that's just part of the incredible sense of overall polish that makes *Diablo III* stand out from its peers. There are plenty of games like it, sure, but we'd struggled to name one that was nearly as slick as this.

WHY IT'S A FUTURE CLASSIC

When we talk about games being 'classics', we're usually referring to the fact that it's as good to play today as it was at launch. *Diablo III* is an odd case, then, because it's already a lot better. While it's technically still possible to play the vanilla game, most versions playable on modern platforms are all-inclusive packages that contain all the new hotness that transformed *Diablo III* into a best-in-class loot grind action RPG. Whether you want to return to the game today or ten years down the line, it's one of these versions that we'd recommend – *Reaper Of Souls* made the experience genuinely bottomless with so many new ways to play and new things to strive towards, and it's a game that has been in our rotation since launch and will be for years to come now we can play it on the go thanks to the Switch release. ✳



» [Switch] The recent Switch release of *Diablo III* features exclusive *The Legend Of Zelda* themed content.

THE MAKING OF:

SPACESTATION SILICON VALLEY

AT A TIME WHEN GAMING WAS INNOVATING AT EVERY TURN, DMA DESIGN WAS LOOKING TO PUSH THE ENVELOPE IN ANY WAY IT COULD. A LENGTHY DEVELOPMENT IN A CREATIVE ENVIRONMENT, HOWEVER, GAVE BIRTH TO ONE OF THE N64'S QUIRKIEST RELEASES

Words by Adam Barnes



One of the most rewarding aspects of the work we do here at Retro Gamer is how speaking with key developers on beloved titles can capture a tangible sensation of particular moments in time. DMA Design is fondly remembered as the developer behind *Lemmings* and *GTA*, but while these are by no means insignificant feats it's perhaps not the best titles for encapsulating what it was like to develop games at the studio. In speaking with Jamie Bryan, who was head of art at the studio, it's clear that *Space Station Silicon Valley* is the game to best understand the creativity, fluidity and experimentation that came with creating games at DMA. "Dave Jones [founder of DMA] had created this environment where a lot of likeminded people had come together, but it was still a diverse crowd."



» [N64] The hope was to create a cartoonish vibe to the game – the bright, colourful graphics being one of the ways this was achieved.



CONVERSION CAPERS

Despite being developed for N64, Silicon Valley popped up elsewhere



PLAYSTATION

■ Rightly considered to be one of the laziest ports of all time, DMA's input amounted to nothing more than handing over the art and code and leaving Runecraft to do the rest. Called *Evo's Space Adventures* on PlayStation – perhaps to purposefully distance the considerably better N64 version from this abomination – it had arguably the worst framerate on PlayStation, bad audio and the bright, colourful graphics of the DMA version were replaced with a dark and miserable look.



GAME BOY COLOR

■ While not nearly as horrific as the PlayStation port, the concept of the game proved to be a challenge to bring over to the Game Boy Color's 2D perspective. Tarantula Studios did a great job of porting the levels in so much as they retained the important visual touchstones and gameplay mechanics of each stage almost like-for-like, but sadly the limitations of the hardware just weren't able to match the grand idea of its Nintendo 64 sibling.



» [N64] The stages all followed the same cliches we would come to expect in platformers, but the challenges were at least varied.

With *Lemmings* releasing in 1991, the developer was on an upturn. Jamie recalls how it was an era of experimentation across the industry, with the prospect of true 3D gaming on the horizon giving rise to a greater interest in hiring artists like himself as game developers.

"I'd been sniffing around DMA for some time because I was working in TV and I was actually quite keen on working on games," says Jamie. "I'd been looking at it for the past few years because game graphics had changed quite a lot and there was more need for using artists." He adds that the industry as a whole was at that level because of the upcoming release of the N64 and PlayStation and that DMA, like everyone else, was keen to get in on the ground floor. "DMA went through quite a rapid expansion, almost like an inflation. And with that a whole group of people were thrown together and inside of that teams were formed. I was made project manager and given a team and told to go and make a game on N64."

All that was provided was a short brief. "There was a design team who fed out some ideas," recalls Jamie, "Dave and a couple of guys who fed out one-page, really kind of high-level spec documents. This one was basically: *Silicon Valley*, animals that fight each other, and then there's this progression of becoming bigger and bigger. That was basically it, there wasn't much to it." The idea was to create a game that had the player gaining abilities as they progress to become stronger and more powerful, eventually able to take on bigger threats and overcome more challenging problems.

Initially this sense of progression would be done through a customisation system that allowed the playable animal to be equipped with different body parts

that added new functions, but that idea evolved. "Me and the core team would sit down, starting with this idea and just sort of building on it," says Jamie, "so it was about answering the question, 'What can we do with these characters?' And a lot of it was just playing with the stuff." This is a large part of what made DMA Design such a creative developer, explains Jamie, who says that not having to stick too stringently to the design docs meant there was much more freedom in design. "We would set a character and we would just play with it. David Osborne, the old head of art, he was a big influence. He was always going on about treating the environment like a playfield and the characters are the toys, and you just play with them and see how they interact with each other." The team wasn't given a set of deadlines or a schedule to stick to, either, which only gave it more reason to experiment. "That was the basis of building out and expanding the characters, to get one character and then stick some wheels on it, see how it flies, see how it bounces, see how it jumps... ▶

WARM BODIES

The most useful animals to control



RACING DOG

■ Combining speed and long-range firepower are two things that remain effective throughout the game, so this rocket-firing turbo dog is certainly an improvement on man's best friend. It's one of the first 'enhanced' animals you'll encounter in the game, and blasting around at speed pelting enemies with rockets is a fun way of introducing the game.



HELI-RABBIT

■ Sure, you could go toe-to-toe with rocket wielding animals, but why bother when you can just drop them from above. For a game about moving around 3D space, the heli-rabbit feels a little like cheating, but when you're able to obliterate enemies from above with minimal ease that's not such a concern.



SKI HUSKY

■ There was something badass about this animal, a wolf-like dog wearing skis, capable of firing rockets and propelled either by a mystical force or its own combustion system (don't ask). He might not have had the cool shades of the walrus or the strength of the polar bear, but there was something about this fella that just made him a riot to play as.



KING PENGUIN

■ Any time a jetpack is added to a game, we're happy. The king penguin – a fun play on the emperor penguin – is essentially the jetpack of Silicon Valley, while his jaunty crown makes sure everyone knows of this royal's wild side. The fact that he can also issue commands to an army of snowball-hurling penguins makes him all the more brilliant.

"IT WAS ALL QUITE DEMOCRATIC, WITHOUT SOUNDING LIKE A HIPPIY COMMUNE"

Jamie Bryan

▶ all that kind of stuff. There was a core set of abilities that we were able to expand right through all of the characters, and we did get a bit carried away with an absence of any schedule so we just started just filling out all these different ideas, all these different parts."

While Jamie was the project manager, there was no real distinction when it came to the design. The iterative nature of development at DMA meant that ideas came from everyone, even those not directly involved with the project. "What we'd do is involve the whole team and just get people to fire in some ideas," explains Jamie, "and then I would collate all the stuff together with my own ideas and then we'd just kind of mash them all together to see what we came up with. It was all quite democratic, without sounding like a hippy commune. The main thing was because it was a love of games, and people just wanted to work on the design process and to feel like their ideas are listened to."

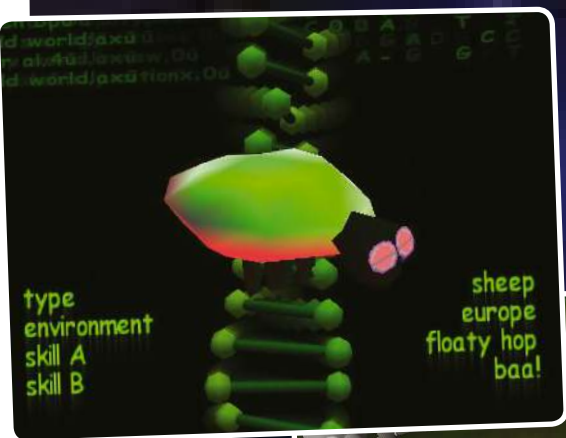
This approach ultimately led to *Silicon Valley's* clear sense of humour. As a result of this direction, a cartoony, comical style was adopted. "That's my natural style anyway," says Jamie, "so I just kind of worked with that. And because we wanted to make it quite a funny game, it just seemed right to keep it comic-looking."

Jamie adds that because it was being developed for N64, *Silicon Valley* was "subconsciously" inspired by the likes of Nintendo's own products. "We were making some kind of Nintendo game on acid. It was like some kind of alternative Nintendo universe." But as it happens, the game wasn't intended to release on N64. Planned as part of a three-game deal with BMG Interactive, *Silicon Valley* and its stablemates *Grand Theft Auto* and *Tanktics* were due to be developed for PC, PlayStation and Saturn. However, with Nintendo pumping a lot of money into *Body Harvest* and even a potential buyout on the cards, the game was instead directed onto N64. "*Silicon Valley* wasn't under the same amount of scrutiny as the *Body Harvest* guys," says Jamie. "Miyamoto and his team were over and there was quite a lot of pressure on those guys to really create something, and it was a really small team as well."

Interestingly, this decision resulted in a certain degree of envy directed at the Silicon Valley team: it was relatively hidden from the attention of Nintendo, and DMA Design had given it free reign, and the N64 itself was the console to develop for at the time.

"When I first started the N64 was just like this amazing, wonderful console that could do everything," says Jamie. "So this was kind of cutting edge tech and it was such a joy to be on it, everyone wanted to be on N64." As a result, those DMA developers still stuck working on PC – even the *GTA* team – were looking to Jamie and his team with a little jealousy. "No one was that keen on being on *GTA* in the early days," says Jamie, "because it was seen as the poor man's project, with old technology." Jamie adds that, somewhat ironically, *Grand Theft Auto* had "seemed like the lesser project" at the time because of how dated it looked.

Silicon Valley rattled on for quite some time after the release of *GTA* in 1997. The two began development in 1995 but *Silicon Valley* would finally release in October 1998. A gestation period for refining the mechanics had ultimately drawn the title out, an unavoidable drawback of the freeform development process that DMA Design preferred to adopt. "I kind of liked that nobody really understood what they were doing," admits Jamie, "but that was the beauty of it, because

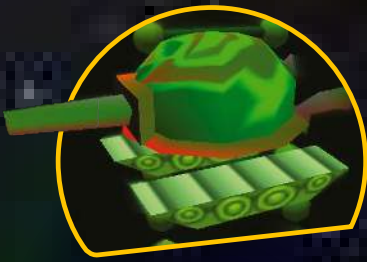


» [N64] Each new animal was presented with a sort of DNA scanner, a novel and fun way of introducing abilities.

» [N64] Note from the author: I just couldn't get passed these two elephants when I first played the game all those years ago.



THE MAKING OF: SPACE STATION SILICON VALLEY



TORTOISE TANK

■ Perhaps the animal that looks the least like an animal in this game, the tortoise tank has an added advantage over the likes of the polar bear – whose turd landmines are, admittedly, kinda funny to use – in that it can hunker down underneath that shell at any time to avoid damage, popping out to fire off a cannonball or two.



LION

■ The king of the jungle doesn't need gadgetry to reign supreme, especially considering he has a roar so powerful that it knocks him back a little. The lion is only playable on a single level, which kind of makes the animal more special in a way – especially when there's so many other jungle creatures to defeat.



CANNON CAMEL

■ It's a boonie-wearing camel with a turret on its back, what more do you want? Well, as it happens this animal can also warp rather than jump. But that cannon is actually one of the best in the game, and when combined with first-person view can be used to pick troublesome enemies off at a distance.



BOXING KANGAROO

■ It might be a fairly contrived use of the kangaroo, but there's something about the way this hopping, boxing marsupial plays that just makes him a delight to use. The fact that his springing jump and large size can get him over most walls is particularly empowering, changing the dynamic of any stage where you begin as one of the little'uns.



» [N64] How each of the animals interacted with one another was part of the learning experience and added greater depth to the mechanics.

it was the time for experimentation. Even down to the control configurations: we came up with some really weird control configurations – like 'why don't we use two controls to control a leg each?', things like that. Your hands were kind of crying in pain by the end of it because you were just mapping buttons anywhere you thought they might work."

All this experimentation and iteration resulted in a game that was compelling to anyone who played it. "Quite a lot of artists and programmers would just come over to see it," recalls Jamie. "I mean, compared to the other games, we were doing quite well. There were a lot of other teams who were really struggling and weren't producing anything close to a finished game." But nor were there any expectations placed on *Silicon Valley*, either; while *GTA* had now released and become a proven success, the PlayStation had also taken over as the console to develop for and the potential Nintendo buyout had collapsed, ultimately leaving *Silicon Valley* as just "this thing that was being developed". Things weren't helped much with DMA's sale to Gremlin Interactive, a necessity since the developer was running out of money – likely due to the extended and uncontrolled development times and the rapid expansion to gear up for the new consoles. This would be "the death of DMA", as Jamie puts it, since the creative and inspiring environment would immediately give way to stricter control, the hiring of producers and

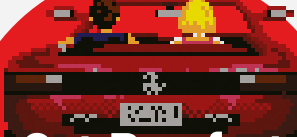


» [N64] You could only leave the stage once the main objectives had been completed, at which point you had to find and access the teleporter.

an insistence on working overtime that naturally didn't sit right with this community of passionate creatives. The atmosphere of the company changed dramatically almost overnight resulting in some rather unpleasant changes that left a sense of resentment in much of the workforce, from the sudden appearance of a large picture of the owner being put up in the entrance, or the operations manager who brazenly admitted that he "doesn't care about games" in his first meeting. "It was kind of clear right from the start that it was more about money," recalls Jamie, "and this was different to the DMA way of thinking where the games came first and enjoying the things you make." Jamie left the company just before the release of *Space Station Silicon Valley*, unwilling to endure the corporate face of Gremlin, and it wasn't long before the rest of the team did the same. Though the game was released to great praise, no one could've have predicted that it was the last true example of what could be created from DMA's unrestricted attitude towards creative development. *



Arcade Perfect



Out Run fact

- Unused code found in *Out Run* shows that at one stage, oncoming traffic was planned for inclusion in the game. Graphics also exist from a motorbike rider as part of the traffic, and these also went unused.





Out Run

» DEVELOPER: Sega AM2 » YEAR: 1986

As a showcase of the latest technology, *Out Run* was one of the most exciting games of 1986. The game's many stages looked beautiful thanks to the sprite scaling technology employed, and the music used FM synthesis, an advanced technology that really brought the compositions to life. None of that would matter if the game weren't enjoyable, and although it wasn't the carefree driving experience that appearances would suggest (the turns are far too tricky for that), it was certainly fun.

Though it was available in stand-up and regular sit-down cabinets, if your arcade needed a centrepiece cabinet in the mid-Eighties, there was arguably no better choice than a deluxe *Out Run*. Yu Suzuki had always been interested in creating simulators, and although the cabinet wasn't as close to a car as *Hang-On* had been to a motorbike, it was the nearest you'd get at the time. The bright red exterior mimicked the Ferrari in the game, complete with wheels and tail lights. What's more, motors would rock the machine from side to side as you powered around bends, and even provide force feedback on the steering wheel. It was exciting then, and remains so decades down the line.



STANDOUT MOMENT

Life's a beach

Although *Out Run* contains 15 distinct stages, the branching structure of the game means that there's only one that you're guaranteed to see every time you play. No matter where you're going, you always start off on that same stretch of road by the sea, lined with palm trees and beach huts. It's no surprise that this type of scene has become the iconic look for the series, and few moments in driving games can match the undiluted joy of tearing down the sandy straights with *Magical Sound Shower* (and yes, that is the best song – don't argue) blasting out of the speakers.

SYSTEM
SUPPLIED BY
**ARCADE
CLUB**



“ A good melody is a good melody, and sometimes has extra charm as a chiptune

Peter McConnell

”



PETER MCCONNELL

Harvard graduate Peter joined LucasArts in the Nineties, where he cocreated the iMUSE music system. He has since gone on to compose and produce some of gaming's most memorable scores

Words by Hareth Al Bustani

After studying music at Harvard, Peter McConnell cut his teeth programming reverb code for audio company, Lexicon. He later moved to San Francisco, where he landed a job at LucasArts. There, he cocreated the groundbreaking iMUSE system, which allowed games to synchronise music with on-screen events, in real time. Peter continued to work on scores for original properties and established franchises alike, with everything from *Grim Fandango* and *Full Throttle* to *Star Wars* and *Indiana Jones*. After LucasArts, the father-of-two has continued working across a broad range of genres, picking up 25 Game Audio Network Guild nominations and four awards for his soundtracks to *Hearthstone*, *Psychonauts*, *Broken Age*, the *Sly Cooper* series and more.

When did you discover your passion for music?

I was born in Pittsburgh, Pennsylvania in 1960, but spent most of my first four years in Basel, Switzerland, where my dad studied theology. Basel is still in many ways an old European city steeped in tradition, especially the German classical tradition. My earliest musical memories are of listening to my father's reel-to-reel tape player. My favourite tapes were of Mozart and an American cowboy band called Sons Of The Pioneers. Ever since then, I've had two musical sides: a classical or art music side and a side that connects to popular forms, like folk or rock'n'roll.

It must have been fascinating studying under Ivan Tcherepnin at Harvard. What role did his teachings play in your approach to production?

Ivan was one of a kind, the son of a Russian composer and a Chinese pianist who had grown up in Paris, studied under avant-garde composer Karlheinz Stockhausen, and was also a great appreciator of pop music. When teaching, he was as likely to refer to Scott Joplin, Al Green, or the time he saw Jimmy Hendrix light his guitar on fire at the Monterey Pop Festival, as he was to quote György Ligeti or Claude Debussy. Ivan had a powerful effect on all of his students. It's hard to describe; it was almost spiritual. He'd rebelled against some of the more rigorous aspects of his own training, and brought a kind of organic approach to studio work. For example, we learned to value the vibe of a workspace as much, or more than, the gear that might happen to be in it.

After university, you were hired by Lexicon. What sort of work was it?

That was my first real job. At Harvard I had studied physics before switching to music, and that was handy when it came to finding work that was related to audio.



» [PC] A commercial and critical hit, the *Indiana Jones And The Fate of Atlantis*, was lauded for its on-point gameplay, storyline, audio and tone.

Lexicon had invented the digital delay and was the premier maker of digital reverbs. You can still find Lexicon gear at top-end studios like Skywalker Ranch. I wrote user interface code on a number of their products and also implemented a pitch-shift DSP algorithm on a unit called the LXP5. I also had a rock band at the time. It was cool to work on gear that big-time musicians like Pat Metheny or Laurie Anderson were using, but my first love was still the music itself.

You landed a job at LucasArts through Michael Land, who scored the original *Secret Of Monkey Island*. How did that come about?

Michael and I had been housemates in college, we played in bands together and I had helped to get him a job at Lexicon after he had gotten his Master's Degree at Mills College. We had a plan with his high school friend Clint Bajakian to go out to the San Francisco Bay Area and start a band. This was well before the dotcom



► bubble, when such a thing wasn't completely insane financially. Anyway, Michael came out to the Bay Area first and by the time I got out there, he had gotten this job at LucasArts. The band kind of fell through, but he was doing really cool stuff at LucasArts and encouraged me to check it out. Up to that point, my experience with games had largely consisted of spending countless hours playing *Zork* and a game called *Airborne!* on the Mac Plus. Seeing what LucasArts was doing with graphic adventures opened my eyes to a new world of possibilities. And I could get paid for not just doing music tech, but for writing music – that to me was incredible.

How rare was it for someone to possess both your music and programming skills?

I think it was somewhat unusual in those days. It's not that there weren't musicians who could

program, because there were – it was common for a working musician to have a day job as a programmer. But audio programming is a special niche, and in my observation it tended to attract very intense engineering types. I had come from a physics and math background before studying music, so I was lucky to have developed both my technical and creative sides.

What was the concept behind the game-changing iMUSE system?

The concept behind iMUSE was what got me excited about working at LucasArts in the first place. Michael had a vision for creating flexibility in how music was played back live in an interactive simulation, and we found that we made a very good design team in realising and expanding that vision. We had a metaphor: the system should be like an idealised pit orchestra in a



» [PC] City-builder *Afterlife* tasks players with building the perfect afterlife, served up with plenty of satire.

musical, where the conductor watches the action on stage and follows it closely. Furthermore, this conductor has a magical ability to direct virtuoso musicians to make smooth transitions to any place in the music at any time, in a way that is, well, musical. The first version of iMUSE took about nine months if I remember correctly. We were very proud of it, and so sure that it would blow everyone away. But it did its job so smoothly that a lot of people didn't even notice.

How difficult was it to flesh out iMUSE from a groundbreaking concept into a working engine?

It was very complicated to use in the beginning. A lot of the difficulty came with acceptance. 'The new sound drivers', as they were called, along with their MIDI files, took up an entire floppy disk in a five-disk game. This was sacrilege! I suggested that we needed to legitimise the 'drivers' in people's eyes, by calling them what they really were – a system, and give that system a name. So, Michael Land and I went out to dinner and came up with the name 'iMUSE'. After that, people accepted it, but it was still way too complicated to use. It went through maybe five years of iterations to become more useable and less of a burden on the audio programmers.

The system would play music at different speeds depending on a system's capabilities. What was the relationship between storytelling and music?

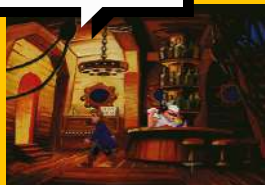
Timing was a big challenge in the early days. And part of the complexity of the iMUSE system was that it could



» [PC] LucasArt's first CD-ROM title was an early adopter of FMV, accompanied by a sweeping John Williams score.



FIVE TO PLAY Essential games from Peter's back catalogue



MONKEY ISLAND 2: LECHUCK'S REVENGE

■ Peter cocreated the iMUSE system with Michael Land for *Monkey Island 2*. The early scenes in Woodtick became stuff of legend, as the score played variations on a central theme depending on which location Guybrush travelled to.



MANIAC MANSION II: DAY OF THE TENTACLE

■ Oft-cited as one of the best adventure games of all time, this title followed three friends working to foil the evil Purple Tentacle. The trio are sent into three timelines; past, present and future – music duties was split between Peter, Michael Land and Clint Bajakian.



FULL THROTTLE

■ This title followed the exploits of a biker gang leader, in his desperate attempt to save his band of misfits, and the last surviving manufacturer of choppers in the country. The soundtrack featured an unexpected blend of Peter's ambient compositions and songs by San Francisco rock band, The Gone Jackals.



GRIM FANDANGO

■ Peter wrote an eclectic score for this gem, the first 3D LucasArts adventure game, but one of its last – marking the end of the golden years of adventure gaming. Peter composed an award-winning score blending together jazz, swing, mariachi, Mexican folk and even acid jazz – all performed by live musicians.



PSYCHONAUTS

■ *Psychonauts* follows a psychic runaway called Raz, who has to platform through both the real world, and worlds within people's minds. Peter's score provides the perfect whacky, diverse accompaniment to the title's creative gameplay, witty humour and immersive storytelling – producing an enduring cult classic.



Walk to
Give Pick up Use
Open Look at Push
Close Talk to Pull

» [PC] Despite being comprised of synthesised sounds, the score of *Monkey Island 2* evokes real-world instruments.

either lead or follow. It was possible to have voice and animation triggered by the music, or have the music adapt to the game. Both capabilities are still useful in games, although due to better performance, the music only has to lead when there is an artistic reason to do so, as might happen in a situation in which game characters are playing in a band.

What software and hardware did you produce the *Monkey Island 2: LeChuck's Revenge* music on?

Monkey Island 2 was authored using a Mac IIsi running Digital Performer, driving sound cards on a PC via MIDI, using a PC utility that I wrote. Writing that utility was my first technical job at LucasArts.

Most of the *Monkey Island 2* score was played in by hand, using a controller. How much did this add to the groove?

We authored all of our scores by hand, using a MIDI keyboard and sequencer. I think it's the only way to go, unless you are working in a techno genre that requires a groove with machine-like accuracy. Precisely because we were confined to synthesised sounds, but trying to refer to traditional live music forms, we wanted things to sound as human as possible. I have always been super careful not to quantise any more than absolutely



» [PC] *Dark Forces II* gave its predecessor a huge overhaul, with improved graphics, online play and a clever score from Peter.

“Part of the complexity of the iMUSE system was that it could either lead or follow”

Peter McConnell

necessary, sometimes to a fault. Parts of the *Grim Fandango* score were even written without regard for bar lines, which came back to haunt me when we did *Grim Fandango Remastered*!

In an age of limited graphics, the music for your *Star Wars* titles was probably one of the most immersive aspects of the games. Were you able to take many liberties?

We had to take liberties eventually, simply because we only had about three hours of John Williams from which to score a large number of titles. My favourite use of this music was in *Force Commander*, in which David Levison and I edited snippets of the Williams recordings over an industrial groove. We even recorded a heavy metal version of the *Imperial March*, with David playing guitar through my Marshall amp setup. It was so loud that we got complaints from offices two floors above ours. After the game came out, there was some concern at LucasFilm that John Williams might not like the arrangement, and I was called up to Skywalker Ranch and politely asked not to take those kinds of liberties in the future. We also got some hate mail from *Star Wars* fans – sound familiar? At least one demanded that I be ‘sent to the mail room’. In truth, I was proud of that version of the March, and I thought it worked well as a tongue-in-cheek parody. But that said, you have to tread lightly with music of that stature, connected to a property that fans feel such ownership of, especially when you are part of the company that represents that property. So I was more circumspect after that.

What was the LucasArts atmosphere like?

In the early days it was kind of like college, only you were getting paid for it. I was told that the initial directive ▶

SELECTED TIMELINE

GAMES

- **MONKEY ISLAND 2: LECHUCK'S REVENGE**, [1991] VARIOUS
- **INDIANA JONES AND THE FATE OF ATLANTIS**, [1992] VARIOUS
- **STAR WARS: REBEL ASSAULT**, [1993] PC, MAC, 3DO, SEGA CD
- **STAR WARS: X-WING**, [1993] PC
- **MANIAC MANSION II: DAY OF THE TENTACLE**, [1993] PC, MAC
- **SAM & MAX HIT THE ROAD**, [1993] PC, MAC, LINUX
- **STAR WARS: B-WING**, [1993] PC
- **STAR WARS: TIE FIGHTER**, [1994] PC
- **THE DIG**, [1995] PC, MAC, LINUX
- **STAR WARS: REBEL ASSAULT II - THE HIDDEN EMPIRE**, [1995] PC, MAC, PLAYSTATION
- **FULL THROTTLE**, [1995] PC, MAC
- **STAR WARS: DARK FORCES**, [1995] PC, MAC, LINUX, PLAYSTATION
- **STAR WARS: SHADOWS OF THE EMPIRE**, [1996] PC, N64
- **AFTERLIFE**, [1996] PC, MAC, LINUX
- **STAR WARS: JEDI KNIGHT - DARK FORCES II**, [1997] PC
- **THE CURSE OF MONKEY ISLAND**, [1997] PC, MAC
- **STAR WARS: X-WING VS. TIE FIGHTER**, [1997] PC
- **HERC'S ADVENTURES**, [1997] PLAYSTATION, SEGA SATURN
- **GRIM FANDANGO**, [1998] PC
- **STAR WARS: EPISODE I - THE PHANTOM MENACE**, [1999] PLAYSTATION, PC
- **ESCAPE FROM MONKEY ISLAND**, [2000] PC, MAC, PLAYSTATION 2
- **THE SIMS**, [2000] VARIOUS
- **THE SIMS 2**, [2004] PC, MAC
- **THE BARD'S TALE**, [2004] PLAYSTATION 2, XBOX, PC, LINUX
- **SLY 2 BAND OF THIEVES**, [2004] PLAYSTATION 2
- **PSYCHONAUTS**, [2005] VARIOUS
- **LEGO INDIANA JONES: THE ORIGINAL ADVENTURES**, [2008] VARIOUS
- **THE SECRET OF MONKEY ISLAND: SPECIAL EDITION**, [2009] VARIOUS
- **INFAMOUS**, [2009] PLAYSTATION 3
- **TORNADO OUTBREAK**, [2009] Wii, PLAYSTATION 3, XBOX 360
- **KINECTIMALS**, [2010] XBOX 360
- **STAR WARS: THE OLD REPUBLIC**, [2011] PC
- **COSTUME QUEST**, [2011] VARIOUS
- **IRON BRIGADE**, [2011] XBOX 360
- **STACKING**, [2011] VARIOUS
- **BRÚTAL LEGEND**, [2013] VARIOUS
- **PLANTS VS. ZOMBIES 2: IT'S ABOUT TIME**, [2013] IOS, ANDROID
- **SLY COOPER: THIEVES IN TIME**, [2013] PLAYSTATION 3, PS VITA
- **HEARTHSTONE: HEROES OF WARCRAFT**, [2014] PC, MAC, IOS, ANDROID
- **PSYCHONAUTS IN THE RHOMBUS OF RUIN**, [2018] PLAYSTATION 4, PC



In the chair with...

▶ given to the company by George Lucas was, 'I don't care what you do, just make cool stuff.' Creativity and thinking out of the box were highly valued, as was a dedication to excellence. Tremendous effort was spent in the final stages of a title, making sure it was polished and fun to play. But it's worth noting that, sadly, this approach may have been taken to extremes and was hard to sustain. At the end of the day, we all need to eat.

When working on the *Indiana Jones And The Fate of Atlantis* and *Star Wars* games, did you spend much time studying the music in films?

Absolutely. It was one of the great perks of the job. I also did a huge amount of music editing with the existing *Star Wars* recordings, and that was a tremendous education.

How did you produce music that would sound great across all sound cards? Which did you think was the best?

This was one of the most exhaustive parts of the job. We had separate versions for FM chips, wave table synths (Roland MT-32) and GMIDI hybrid sample-based cards (primarily the Roland Sound Canvas). For *Monkey 2*, we even had a PC speaker version. Generally, we liked the Sound Canvas best, because it sounded the most like live instruments, although for certain tunes, the warmth of the MT-32 was very nice. But not a lot of users had those high-end cards, and we worked very hard to make the FM versions sound good.

***Sam & Max Hit The Road* was one of the earlier games to include full music and voiceovers. Did the advent of CD-ROMs completely change your approach to audio production and budgeting? CD-ROMs were a watershed, because they allowed for live, recorded music. When we first saw what**

programmer Vince Lee did with recordings of John Williams in *Rebel Assault*, we knew everything had changed. *Sam & Max* was done at about the same time. As for the budgets, they are never enough. The sound team is always fighting for its share of storage, CPU and budget and we almost always come last. 'Twas ever thus. Our big goal was ten per cent. If we could get 10 percent of all three of those elements – storage, CPU and budget – we were pretty happy.

***Full Throttle* won your first ever award, PC Gamer's best soundtrack of 1996. Did you enjoy working with digital music?**

I loved working with digital music and especially with live rock'n'roll. The Gone Jackals were an incredible band, the real deal. It was a privilege to work with Keith Karloff, their front man, who is a true artist. I think that music has held up even better over time, and Keith still plays shows every week. And even though my ambient music is a majority of the soundtrack, it ultimately serves as a kind of wrapper for the Gone Jackals.

Your soundtrack for *Grim Fandango* is a masterpiece – drawing upon so many influences with such fluency. What was your usual process for setting the tone, with Tim Schafer?

Tim was very much influenced by film noir in *Grim*, so he sent me his collection of Humphrey Bogart films to watch – and I watched them over and over and then obtained scores from *Casablanca* and *The Treasure Of The Sierra Madre* from Warner. Tim also sent me a collection of Mexican folk music called Son, which helped to influence some of the folk elements in the score. In addition, I was profoundly influenced by a jazz course I took in college, as well as by the San Francisco Swing Revival that was going on in the late Nineties.



» [PC] Peter was able to tap into his love for rock music when working on the score for the biker-themed *Full Throttle*.

There was a district in San Francisco where you could hear swing in one club, acid jazz (which was bop influenced) in another, and then go around the corner to a taqueria and hear a mariachi band play. It was like having the whole *Grim* score right there in one neighbourhood.

You reunited with Tim Schafer on the brilliantly scored *Broken Age*, to great acclaim – what do you make of the adventure game revival?

Broken Age felt more to me like a continuation than a reunion, since I have been fortunate to score all of Tim's games from the beginning. That said, it was a welcome return to the adventure game genre. I've always been interested in story-driven experiences, whether they are in adventure games or in a platformer like *Psychonauts II*.

Listening to the soundtrack for *Psychonauts*, how significant a role does parody play in composing for videogames?

For me it plays a huge role. *Psychonauts* is a particularly clear case because the whole premise is a parody of the 'spy team' or 'superhero team' genre. But with a very few exceptions, videogames are essentially referential. Sometimes this has been to imitate other more established forms, like film. But at their best, games refer to other cultural elements as part of their basic nature: to gather familiar or fantastical experiences together and make them interactive. That gathering and re-experiencing itself can be seen as a kind of parody.

Could you tell us how the Game Audio Network Guild was formed and how it has changed the industry?

Full disclosure: I'm a founding member of GANG and was active in its launch. I think all of us game audio professionals owe a debt of gratitude to the organisation and to Tommy Tallarico, who was the original driving force behind it. More than any other group or person, GANG is responsible for audio being taken seriously by



» [PC] Tim Schafer gave Peter tons of classic noir films to inspire him for *Grim Fandango*.

“ CD-ROMs were a watershed, because they allowed for live, recorded music ”
Peter McConnell

YOU ASK THE QUESTIONS

We point Peter to your questions, and he clicks 'reply'

MERMAN: How many instruments can you play?

I play most things with strings on them, except cello and harp, plus keyboards. The real question is: how many do I play well? Maybe electric violin and five-string banjo. Possibly certain styles on acoustic guitar. I love a wide variety of music and, instrumentally, I have gone wide as opposed to deep.

RORY MILNE: Do you prefer composing for movie-inspired titles or original IPs, and how does your approach to working on these two categories of games differ?

I am grateful for having had the opportunity to spend countless hours editing John Williams' music for *Star Wars* titles, just as I am grateful for the chance I got to write for original titles like *Grim Fandango*, *Psychonauts* and *Hearthstone*. Of course, working on big properties like the *Star Wars* franchise comes with some very specific requirements. You need to be faithful to the spirit, if not the letter, of precedent. We have all seen how that can play out in some of the recent *Star Wars* movie sequels. Learning to work within an established world like that can be a rewarding challenge, as long as it doesn't define your path.

PARANOID MARVIN: Did the iMUSE system end up being all you expected it to be?

My only regret about the iMUSE system is that it was essentially shelved when the creators left LucasArts. But, we did everything we wanted to do with the system while we were using it. At this point it just feels like a nice little piece of history. And I am happy with the influence it seems to have had on the industry at large.

MERMAN: What film/TV programme would you like to have scored?

The original *Mission Impossible* TV show. Lalo Schiffrin is a god.



» [PC] This high-res remaster gave a facelift to the original *Monkey Island* title, with Peter on violin for the soundtrack.



» [PC] Peter famously fused Celtic folk with blues for his award-winning soundtrack to Blizzard's online trading card megahit *Hearthstone*.

the industry. This has translated into higher production quality, bigger budgets and better paychecks for all of us.

How much easier is it to produce music for games now, with software and hardware improvements, than in the mid-Nineties? Are you ever nostalgic for the 'good old days'?

It's much easier now to get a 'good sound', of course. But getting the sound you want should always be at least a little bit hard, no matter how impressive your resources. I do all my work except for major live recordings in my home studio, and I wouldn't trade that for anything, especially because I get to be near my family. And honestly, I do not pine for the 'good old days', except that it was great fun to work with that group of people. In fact, in the 'good old days' we couldn't wait until we could record a live orchestra.

What sort of home studio setup do you have?

I work in a room outside my house that was originally built by a musician as a flute rehearsal studio. It's small but has nice high ceilings and a good sound. I also like the vibe because it's right in the yard where my kids play, and we have a lot of nature around us. I author in Pro Tools on a souped-up trashcan Mac with a ton of sample libraries running in Vienna Ensemble Pro. I also have some vintage outboard gear from the Eighties and a wall of guitar amps (Fender Super Champ head, Mesa Boogie Mark III and a 1971 Marshall JMP-1, with a nice big Mesa cabinet), along with a small collection of guitars and other instruments. I can get a wide variety of electric guitar and violin sounds with that rig. It always helps to have the right gear for a particular sound, and it's worth it to have to put some effort into getting the right sound. I used to work pretty intuitively with gear, and I hated opening a manual. But over the years, I have found great value in mastering my tools. Otherwise they will master you, and get in the way of being creative.

If you could go back and remaster all your old soundtracks with full orchestras, would you? And as someone who has constantly strived to

advance the tech, does the current indie embrace of mock-retro music sounds seem a little ironic?

I'd welcome the opportunity to remaster anything, frankly, just because from a purely musical point of view I'd love to hear some of that old stuff played by real people. But that's on a musical level, apart from the game experience. For titles like *Day Of The Tentacle*, for example, I think the original experience – complete with graphics, music and gameplay – is all of a piece. And it would undermine the charm to try to make it slick by modern standards. My family and I recently visited the Museum Of Computers And Games in Wroclaw, Poland, while I was part of the Game Music Festival 2018. We got lost in the sights, sounds and pure fun of *Pong*, *Pac-Man*, *Mortal Kombat* and *Mario Rainbow Road*. Not once did I think, 'Man, someone should remaster these!' So I don't think it's ironic at all that there is a growing fondness in the indie world for retro sounds. Especially at a time when massive resources are poured into triple-A soundtracks to sound epic, when that sound may not always be called for. A good melody is a good melody, and sometimes has extra charm as a chiptune.

What are you working on at the moment?

Psychonauts II, and we plan to work with Melbourne Symphony Orchestra on that, as we did with *Broken Age* and *Grim Remastered*. I'm also finishing an orchestral score to an indie sci-fi horror film called *Intersect*, which is scheduled for release sometime next year. ✨

Many thanks to Disney and GOG for providing the games featured in this article.

Adventure Game

IT DOES WHAT IT SAYS ON THE TIN

» RETROREVIVAL

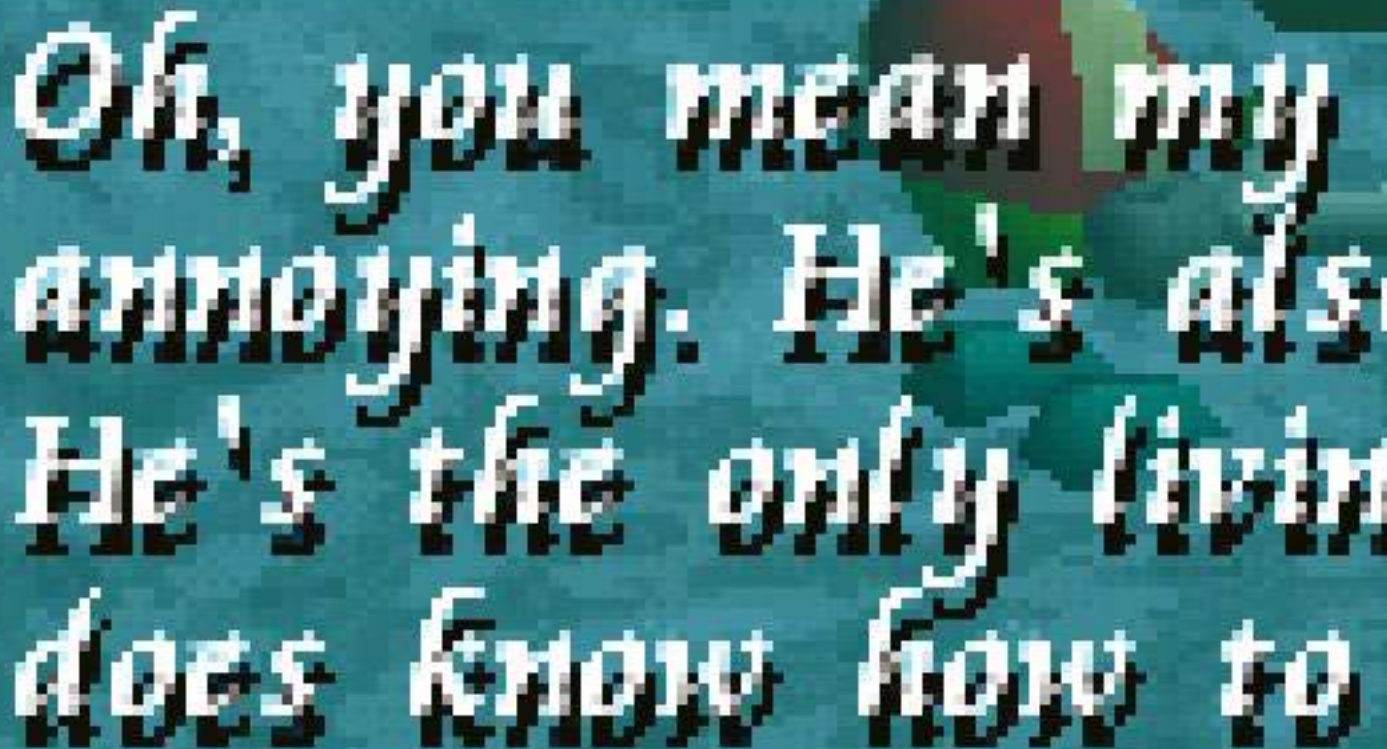


» PLAYSTATION » 1999 » ROBERT SWAN

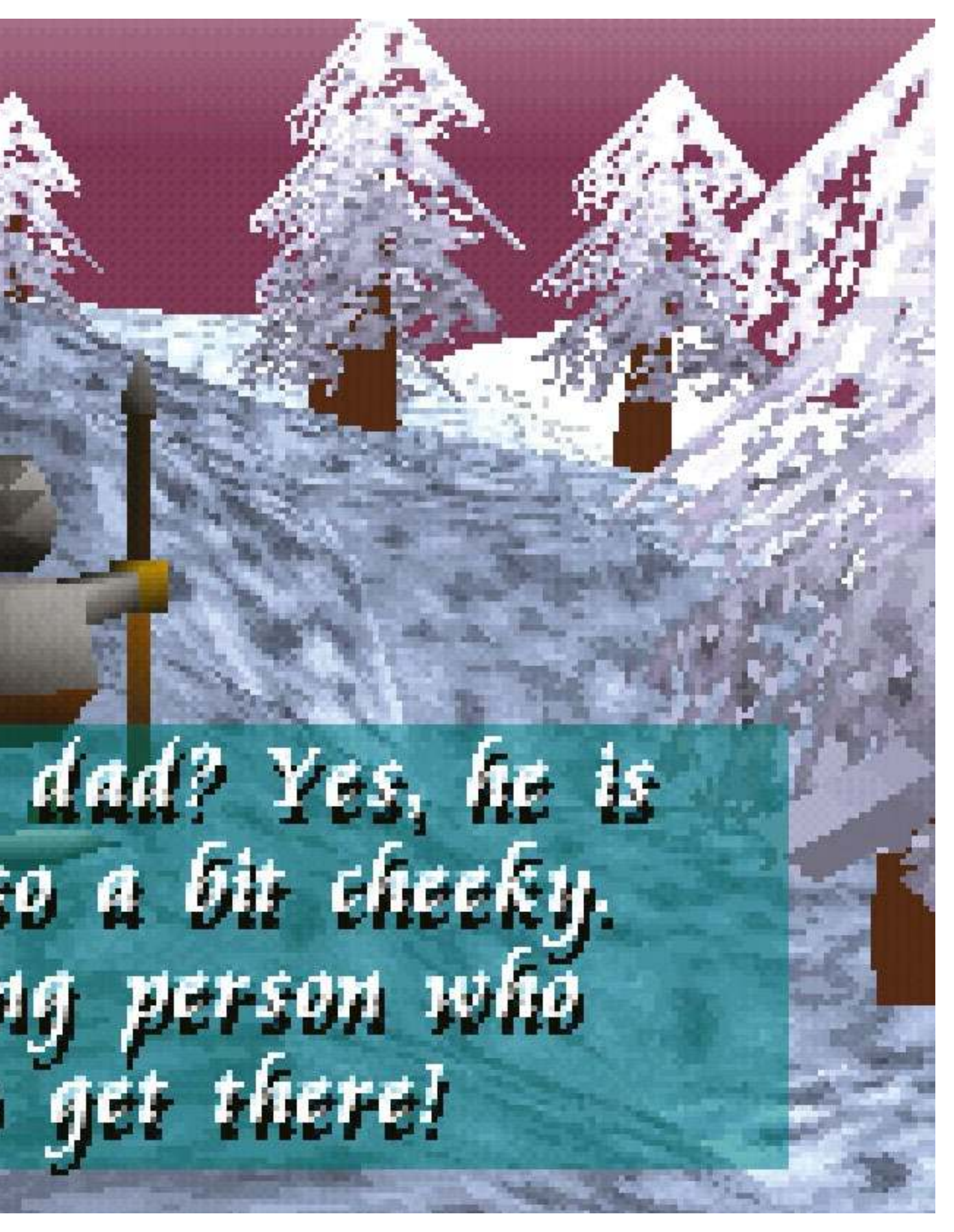
It's no secret that for most readers, the highlight of the Official UK PlayStation Magazine was its monthly demo disc. Not only was it a great way to sample upcoming releases, in later issues it began to carry memory card saves for popular games and even 'goal of the month' videos, giving a nice community feel in the days before widespread internet access. However, I always loved the Net Yaroze games the most. These were amateur games made by bedroom coders, and although they usually weren't as graphically polished as retail games they were often quite interesting – and some games like *Total Soccer* and *Time Slip* were really very good.

My favourite of the lot was *Adventure Game*. With a full 3D world and multiple scenes, it was certainly one of the most ambitious Yaroze games, and there was an actual quest to complete (although I'd wager few people did, as it was bloody hard). But it was also a bit crap, in the best kind of way. The enemy birds had two frames of animation, the characters are completely untextured and combat system consists of a single sword thrust attack. Robert Swan clearly knew this and decided to lean into it, as his hero poked fun at the game's technical shortcomings, as well as dreadful RPG tropes and even the dodgy translation of *Terra Incognita*, another Yaroze game.

Of course, the last laugh went to Robert Swan – he ended up with a job at Sony, working on games like *This Is Football*. ★



Oh, you mean my
annoying. He's als
He's the only living
does know how to

A pixelated winter scene featuring several snow-covered evergreen trees against a dark red sky. In the foreground, a wooden signpost with a white sign is visible. The sign contains text in a pixelated font.

dad? Yes, he is
so a bit cheeky.
ing person who
get there!



» This month we give our official verdict on the PlayStation Classic, stack blocks with Tetris Effect and play through the Spyro and Toki remasters

PlayStation Classic

SONY UNDERESTIMATES THE POWER OF PLAYSTATION

INFORMATION

- » **RELEASED:** OUT NOW
- » **PRICE:** £89.99
- » **MANUFACTURER:** SONY



When Sony first announced its entry into the retro plug-and-play field, we got the sense that it could be a monster hit that could provide serious competition to Nintendo's NES Mini and SNES Mini – after all, the PlayStation is one of the most popular consoles ever. Unfortunately, first impressions can sometimes be misleading and the PlayStation Classic is a device that has the capacity to underwhelm in many areas.

Externally at least, the PlayStation Classic is lovely. The miniaturised console is a cute replica of the iconic machine, and clearly shows attention to

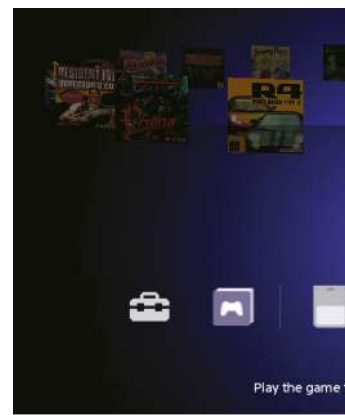
detail – even the raised bumps on the disc lid are present. The buttons are all functional, with the open button for the disc tray used to change discs in certain games. The controllers feel perfect to hold and play with as they're highly accurate to the original, and you get two with the machine which is always nice. There's been some disappointment that DualShock controllers aren't included, but though we'd have loved to have revisited that famous Psycho Mantis scene in *Metal Gear Solid*, most of the games just don't support DualShock meaningfully.

The games list is pretty strong. The selection does a solid job of providing mass appeal, historical representation and variety. You've got third-party hits, some key first-party releases and some oddities which seem to be there to provide genre balance (we're looking at you, *Rainbow Six*). Although *Cool Boarders 2* feels significantly worse post-*Tony Hawk's Pro Skater* and *Battle Arena Toshinden* is probably best left as a fond memory, most of the games still play quite well today. There's plenty of lasting value thanks to the likes of *Final Fantasy VII* and *Persona*, and games you may have missed like *Intelligent Qube* can surprise you with their quality.

It's worth briefly addressing the games that *aren't* included. Like most plug-and-play consoles, Japan also



» [PlayStation Classic] The characteristic PAL borders are gone, but *Tekken 3* feels sluggish at 50Hz.



* PICKS OF THE MONTH



DARRAN

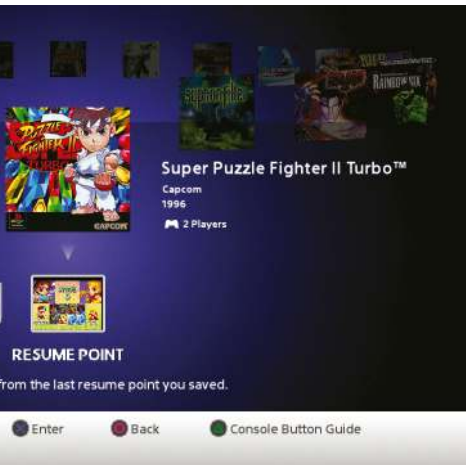
Sega Mega Drive Classic
This arrived a little too late for review, but it's just as solid a collection as the earlier Xbox One and PS4 versions.



DREW

Pokémon Let's Go: Eevee
I've been watching my partner play this, and the nostalgia-driven excitement it draws out of her is endearing to see.

» [PlayStation Classic] The game menu is well designed and styled after the original machine's internal menu, but lacks options.



gets a different list of games. While we're big fans of some of the games on the Japanese machine (Drew was particularly upset that we didn't get *Armored Core*), the international list clearly resonates better with its target audience. The bigger problem is what's missing from both versions. It might well be impossible to create a list of 20 games that people would agree on as a definitive representation of the hardware, and nobody could realistically have expected to see *Gran Turismo* due to its heavy use of licensed cars. But iconic PlayStation brands like *Tomb Raider* and *Crash Bandicoot* don't make it in, and that will upset some.

Unfortunately, regardless of whether or not you like the games included, the PlayStation Classic does not represent them well. Between the hardware and the emulator used (PCSX ReARMed), the games just don't run as well as they should – some visual effects are inaccurately represented and we noticed slowdown in games that previously didn't have any, including a particularly



» [PlayStation Classic] Some of the visual problems are inherent to the original games, such as the polygon tearing here.



» [PlayStation Classic] Regardless of the machine's poor technical performance, it features true classics you'll still enjoy.

nasty drop in *Jumping Flash* when the music reached its end and restarted. Compounding the problem, nine of the 20 games included are 50Hz PAL versions, which run slower than the original NTSC versions (though mercifully, the characteristic black borders have been cropped off). You might not notice if you're used to PAL games, but we felt that something was off after just a short while with *Tekken 3*, having recently played the NTSC version. The decision to include these inferior versions is baffling, especially since the console is being sold like this outside of the traditional PAL territories. We'd be curious to see if this issue affects the Japanese version, too – we'd assume that the need for Japanese language support in games like *Resident Evil: Director's Cut* would prevent it.

The problems continue with video output. Although the PlayStation Classic outputs 720p video over HDMI, image quality suffers from a blurry filter – and you're stuck with it, since there are no video options at all. Standard features such as borders, scanlines and even the ability to change the aspect ratio are all absent. In fact, beyond the virtual memory cards (one for each game) and the ability to create a 'suspend point' by hitting the reset button, there's not much to mess with in the console's menu. That's a shame, because time has clearly been spent on creating a theme that matches the old console's internal menu.

If you don't care too much about playing the games as intended, the



» [PlayStation Classic] Some USB keyboards let you access locked menus, but they do affect performance.

PlayStation Classic does the job. It's certainly possible to have fun with the machine as the line-up of games is mostly very good, and you'd struggle to replicate it for the same price (even without the obscenely expensive *Persona* included). But Sony's previous attempts at PlayStation support on the PS2, PS3 and PSP/Vita don't have the performance problems of the Classic, and generally offer more video output options. We'd imagine many of you still have access to those systems, and of course you'd get to pick your own line-up of games, so they're a better option for PlayStation nostalgia. As a result, the PlayStation Classic can only really be recommended to the more casual retro gamer, and that's a real shame. *

In a nutshell

The PlayStation Classic offers a variety of good games at an attractive price, but can't match Nintendo's miniature offerings for polish – or even previous PlayStation support from Sony, for that matter.

★ THE GAMES

ALL VERSIONS

Battle Arena Toshinden*
 Final Fantasy VII
 Intelligent Qube
 Jumping Flash*
 Metal Gear Solid
 Mr Driller
 Resident Evil: Director's Cut*
 Revelations: Persona
 Ridge Racer Type 4
 Super Puzzle Fighter II Turbo
 Tekken 3*
 Wild Arms

INTERNATIONAL VERSION ONLY

Cool Boarders 2*
 Destruction Derby*
 Grand Theft Auto*
 Oddworld: Abe's Oddysee*
 Rayman
 Syphon Filter
 Tom Clancy's Rainbow Six*
 Twisted Metal

JAPANESE VERSION ONLY

Arc The Lad
 Arc The Lad II
 Armored Core
 Devil Dice
 G-Darius
 Gradius Gaiden
 Parasite Eve
 SaGa Frontier

*PAL version

* PICK OF THE MONTH

Tetris Effect

» System: PS4 » Buy it from: Online, retail » Buy it for: £29.99

Enhance naming its new *Tetris* game after the phenomenon where people play too much of the iconic puzzler that they start seeing blocks in real life is a masterstroke. Because that's exactly what's happened to us, once again, playing the new synesthesia-infused *Tetris Effect*.

Ostensibly it's the same *Tetris* we've known for what feels like a millennia, however Tetsuya Mizuguchi and his team has drawn on their experience from making *Rez*, *Lumines* and *Child Of Eden* to transform the game into an experience. Each level starts off clean, empty and silent, but as you gradually clear lines of tetriminoes the audiovisual experience builds into a crescendo of sights and sounds. It's thrilling to experience. However, it can be distracting, and in those times where you feel you're hanging on by a thread, the last thing you want is a large fish swimming past your playfield – it'll be a pretty nice fish, though.

Journey mode is the highlight of the entire game. It's a pretty standard a-to-b gauntlet of levels that portray landscapes from windmills and firework displays to tribal celebrations

and space stations. The unique aspect of this mode, however, is the Zone system. As you build lines you fill a Zone meter, once you've got a sufficient amount you can then hit R2 to slow down time; you've entered the Zone. Once in the Zone, you still clear lines, but they remain on the screen, and once you've run out of meter all the lines you built up trigger at once allowing you to create mad creations like a 'decahexatris' or 'perfectris' – and even a 'ultimatris' if you're a *Tetris* god.

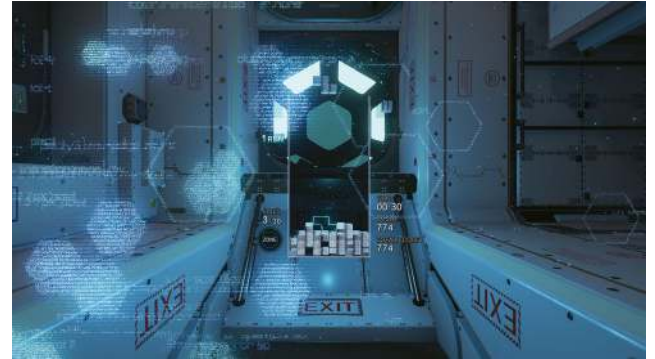
In terms of other modes you have your usual suite of marathon and challenge modes you'd come to expect from a modern *Tetris* game. Which kind of positions *Tetris Effect* as the most definitive *Tetris* game you can buy today. We'd say *Puyo Puyo Tetris* will perhaps offer you a lot more longevity and multiplayer action, but for pure *Tetris* enthusiasts you can't get better than this. Add in to the mix that you can play *Tetris Effect* using PlayStation VR and you might not see the light of day for a very, very long time.

>>

Score **90%**



» [PS4] There's a handful of vocal tracks and they're all memorable.



» [PS4] The variety of visuals you'll experience in Journey mode is palatable.

Pokémon: Let's Go, Pikachu! & Eevee!

» System: Switch » Buy it from: Online, retail » Buy it for: £49.99

A set of remakes of 1998's *Pokémon Yellow*, *Pokémon: Let's Go, Pikachu!* and *Let's Go, Eevee!* do a superb job of refreshing a familiar game 20 years on.

The bones of the original game remain, which means it's back to basics. Which means no abilities, breeding, held items and day/night cycle of the more recent entries in the series, and just the first generation of 151 'mon. That's not to say it's a complete nostalgic retreat, though. Following its roaring success, a number of mechanics are borrowed from *Pokémon Go*. Using candy to increase your Pokémon's stats, Combat Power as an overall measure of strength and, most noticeably different from previous *Pokémon* games, the catching system.

Gone are the wild encounter battles and merely catching the roaming critters grants your party experience, which is sometimes easier said than done. Either a flick of the wrist with the Joy-Con or pressing A whilst aiming with the gyro in handheld mode will throw your Poké Ball. Whilst the former awards extra XP, it also suffers from some quirky motion control. Stray Poké Balls and mistimed throws become an increasing annoyance as the game progresses.

Like the 20-year-old original, *Pokémon: Let's Go, Pikachu! & Eevee!* will rarely challenge you. That is until you tackle the post-game, where you vie to become a master trainer of specific species – say, a Snorlax Master Trainer. And catching the entire 151 Pokémon has never been easier, but you'll only get the best if you use Catch Combos (consecutively catching the same Pokémon) to increase your chances of finding 'mon with top stats, or even an illusive shiny.

Omissions such as cycling, fishing and the Safari Zone will come as a disappointment to some, but are not sorely missed. But conversely, some new nods to the series' history (such as Team Rocket's Jessie and James, being as incompetent as ever) will raise some smiles.

The game is a beautiful reimagining of Kanto. Watching wild Pokémon roam the overworld around you, listening to the reorchestrated soundtrack and interacting with your eponymous buddy (in a dapper waistcoat and shades if you wish) is a joy. There's plenty here for new players and veteran fans alike.

>>

Score **84%**



» [Switch] The novelty of seeing wild Pokémon roaming Kanto around you rarely wears thin.



» [Switch] Some Pokémon, like the legendary birds, may require besting in battle before catching.

THE ULTIMATE GUIDE TO NINTENDO'S GREATEST CHARACTERS

Celebrate Nintendo's dazzling array of characters and franchises, from Mario and Donkey Kong to Fire Emblem and Animal Crossing, and discover how Nintendo became a dominant force in gaming.



FUTURE



Ordering is easy. Go online at:

www.myfavouritemagazines.co.uk



Or get it from selected supermarkets & newsagents

Spyro Reignited Trilogy

» System: PS4 (tested), Xbox One » Buy it from: Online, retail » Buy it for: £34.99

Following the success of last year's *Crash Bandicoot* remasters, fellow PlayStation platform star Spyro is next up for a facelift – although the years have been pretty kind to begin with.

The original games were technically impressive and pushed the boundaries of what was possible on the PlayStation, and the 3D environments in this trilogy are larger than you might expect for games of that era. There's plenty of variety in terms of your objectives, the controls are tight and Spyro's range of moves remains satisfying, whether you're ramming an enemy at high speed or charring them with the hero's fiery breath. The graphical upgrade is obviously enormous, and puts the games easily on par with the best cartoon-style games of the current generation. There have been many claims of 'real cartoon graphics' over the years, but the cutscenes don't look all that far off today's CGI cartoons on TV. Likewise, the new sound design is excellent, with some great updates of the music and high quality voice acting.

One oddity is that the camera doesn't follow Spyro's movement and is exclusively adjusted with the right analogue stick. It'll never be pointing anywhere except the place you've told it to, but you do constantly have to tell it where to look. As with the *Crash* remaster, there's no option to use the original style, but unlike *Crash* there have been some creative reinterpretations that take characters and environments a bit further from their original look. They're perfectly attractive and wouldn't look at all out of place in a new game, but might well be jarring to long-term fans. One more bugbear is that load times feel a bit lengthy by modern standards.

Still, those are relatively minor points that shouldn't detract from what is a very good package – especially given the price point. The three games will last you a good while, and the strong remake work ensures that they can still be enjoyed by old fans and today's younger players alike.

>>

Score **82%**



» [PS4] This should strike a chord with those that grew up with Spyro in the Nineties.

» [PS4] Some parts of the game have been reinterpreted, rather than remade.



Heavy Burger

» System: Switch, PC » Buy it from: Online » Buy it for: £15.99

Heavy Burger casts you as *Burger Time's* Peter Pepper in an overhead shooter reminiscent of *Heavy Barrel*. Your goal is to grab a bag of cash and deposit it in the bank before the enemy Peter Pepper does the same. Both have access to a wide range of weapons to try to stop each other, and both have to deal with enemies pulled from a variety of enemies pulled from old Data East games, as well as environmental hazards such as a maze (*Lock 'N' Chase*) and pool balls (*Side Pocket*).

The single-player content is limited to challenges, and although stages can be mixed in any order, there aren't too many. However, this unexpected mashup is great fun for up to four players, as the back and forth American football-style gameplay produces some great moments.

>>

Score **84%**

Toki

» System: Switch » Buy it from: Online, retail » Buy it for: £39.99

Our recent Ultimate Guide in issue 188 demonstrated that the original *Toki* is still a lot of fun to play, so it's been interesting to get our hands on this beautiful looking Switch update. Like last year's port of *The Dragon's Trap*, this has been giving a stunning makeover on Switch and it looks absolutely delightful in places. Sadly, that's where the similarities end, as there's no option to either listen to the original music or switch to the original arcade game's distinctive graphics. This feels something of an oversight considering this is essentially the same game you would have played in the arcades back in 1989. There's no denying that *Toki* is enjoyable, but it feels distinctly lacking in replay value, even with its additional difficulty levels. Enjoyable, but expensive.

>>

Score **70%**



#8BIT Symphony

A Symphonic Celebration of
Home Microcomputer Gaming

Hull City Hall, 15th June 2019

THEMES FROM:

FIRELORD
TRAP DEMO
GREEN BERET
COMIC BAKERY
OCEAN LOADER
FLASH GORDON
THE LAST NINJA®
MONTY ON THE RUN
FORBIDDEN FOREST
INTERNATIONAL KARATE

AND MORE

The Last Ninja is a registered trademark of System 3 Software Ltd
All other trademarks are acknowledged as the property of the respective rights owner

Proudly supporting the SpecialEffect and
Macmillan Cancer Support charities

Tickets available at: hulltheatres.co.uk

Visit the concert website at: 8-bit-symphony.com

Gamers HOMEBREW

Brewing since 2005



Survive!

Score: 0028



» [C64] Heading onwards and upwards with *Tower Of Rubble 64*.

Gaming
NEWS



» [Amiga] Pull the lever in *Mink Gold 2* to open the exit.



» [C64] *Rogue Burger One* offers up some incredibly fast food.

TOWERS AND MINES

There's been some multiplatform competition news this past month, specifically the **RetroKomp competition**. This was its second outing and 11 entries were released over a range of platforms, with the top position taken by *Tower Of Rubble 64* which is a fast-paced action game where a small figure must survive for as long as possible, avoiding and climbing onto blocks that tumble into the play area. Every now and then a laser beam will appear which must also be avoided.

The Amiga did well out of this event; both *Mink Gold Return* and *Magazyn* are single-screen, maze-based challenges, with the former being about high-speed collecting action and the latter, which is a preview for the moment, taking its cues from the venerable *Sokoban*. *AMIner* features an advanced mining machine which tunnels downwards

in search of precious metals and gemstones with only the occasional break to refuel and drop off its precious cargo, while *Choctris* is a *Tetris* clone with some very slick presentation. On top of those there was also an Amiga CD32 release, *Pong 4K* is a rendition of the classic bat-and-ball game which has undergone a graphical overhaul and features CD-based audio tracks in the background.

Super Nutmeg is a scrolling platform game for the Dreamcast which contains some very nice graphics and Amigalike soundtracks during play, while *Zwierciadlo* – which translates as 'mirror' from Polish – is on the Sharp MZ and challenges the player to lead two avatars to their on-screen goals with just one set of controls. Kikstart.me.uk/retrokomp-2018 has further information on the entries and relevant download links, although some of these titles are

still considered to be works in progress by their developers.

One of the more surreal releases we've come across recently has to be *Rogue Burger One* for the C64; it's a flip-screen action game and the instructions on the title page boil things down to 'don't die, pick up stuff, shoot other stuff' – that's perfectly serviceable, of course, but does manage to skip over a few details, such as the player being in control of a flying hamburger. It also serves as a practical demonstration of programmer Leuat's *Turbo Rascal* integrated development environment. That's currently not complete, but there's enough features working to actually program C64 games or indeed demos, so this may well be something for the programmers reading to keep an eye on. Go to Kikstart.me.uk/burger-one-c64 for more info.



NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: retrogamer@futurenet.com

HOME BREW HEROES

Raúl Nogales is the head honcho at Luegolu3go Studios and one of the people behind recent release *Nogalious*, so we stopped him for a quick chat about the challenges behind porting a PC game to the MSX

To begin with, who was behind the conversion of *Nogalious* to the MSX?

The version for MSX computers was made by the same team which developed the version for PC which features visuals created by Toni Galvez and music by Gryzor87.

And how difficult was the process of taking a PC game and getting it to work on Eighties hardware?

We experienced very difficult parts: on the one hand, generating the assembly functions which allow us to show the graphics on screen fluidly – the screens have more than 500 different tiles and images change at 50hz to include more colours – and managing all of this information without slowing down the game was difficult.

Which development utilities have been used during the creation of *Nogalious*?

I guess that there are tools, libraries and toolchains to cross-develop in MSX, however at Luegolu3go we've developed our own assembling engine, C, and scripts to compile and build the megamom. We have also used tools such as the SDCC compiler, Arkos Tracker for music and Promotion for graphics. This is certainly the most complex part of all but it allows you to create magic in



» [MSX] The only safe route through this area involves a little island hopping.

a computer such as MSX. It's very satisfying that a 30-year-old machine such as the MSX is capable of making incredible things with such little resources.

How has the MSX community responded to *Nogalious* so far?

The community is expecting big things because they have seen the graphical evolution since we published the first screenshots, and we have introduced new ones made by Toni Gálvez and they show quite a huge improvement.

Are there any future plans for ports to other systems that our readers would also be interested in?

Yes, we are going to develop versions for Amstrad CPC, Commodore 64 and Sinclair ZX Spectrum.

That's quite a range of platforms, what challenges are involved when porting to so many different home computers?

The big challenge is to

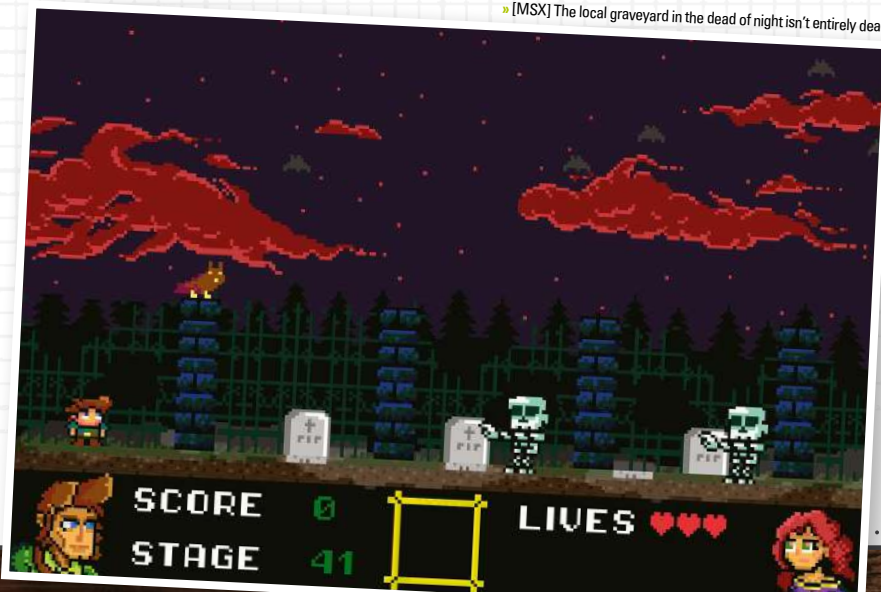


comprehend the hardware in depth because each has its own limitations and advantages. It's complex to represent graphics with so many limitations: two colours, 8x8 pixels and two lines per screen. There are differences between platforms, so it's not the same to have eight sprites in the screen which move all around just by changing a few bytes than implementing it yourself on another computer because there is no such function.

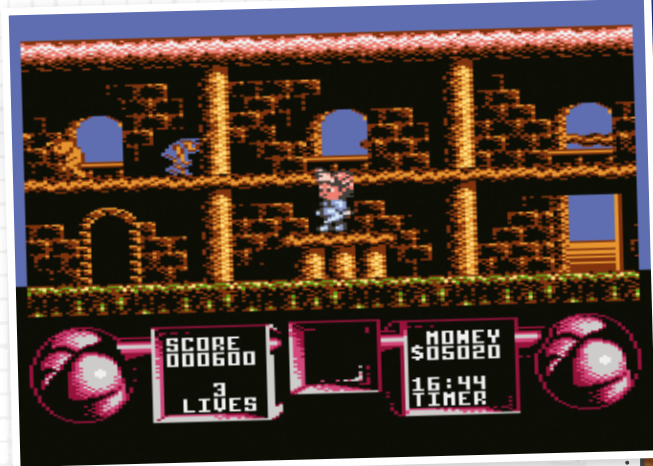
Therefore, the big challenge in porting the game to different platforms is to find a different solution for each of them in order to have an homogeneous result in spite of the fact that the systems are heterogeneous.

***Nogalious* on MSX is out now. Look out for later 8-bit versions soon.**

» [MSX] The local graveyard in the dead of night isn't entirely dead.



» [Atari 8-bit] There's the little... darling that we need to shoot for an item.

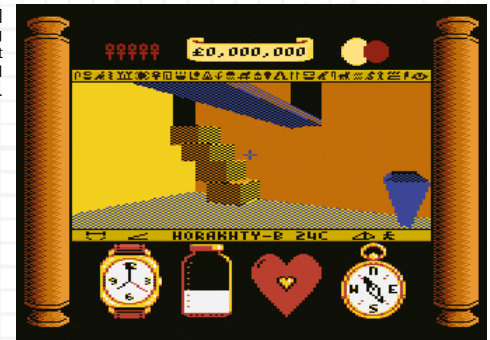


SEI LDNMI

One of the releases at the recent SillyVenture demo scene party was an unexpected work-in-progress Atari 8-bit conversion of System 3's C64 platformer *Flimbo's Quest*. According to the developers there's still quite a bit to do – its currently only two partially populated stages and requires over 300K of RAM, but the team plans to add the remaining stages and cram everything into a manageable size.

There's some lively discussion in the Atari Age thread at Kikstart.me.uk/flimbos-prv-a8 along with the playable preview – hopefully the full game isn't too far away.

» [Atari 8-bit] Employing just a little bit of pyramid power.



OF THE HEART

Another C64-to-Atari 8-bit conversion is the Freescape-powered 3D adventure *Total Eclipse*, where the player enters an Egyptian pyramid to find the Sun-God Re's shrine and prevent it from destroying the moon – since that has the potential to end civilisation in the process.

The programming was carried out by regular code porter Mariusz who has put a lot of work into the conversion, adding several optimisations to the code along the way to make this new version a more comfortable experience to play. It can be discovered behind Kikstart.me.uk/eclipse-a8.





Gaming REVIEWS

DO YOU REMEMBER?

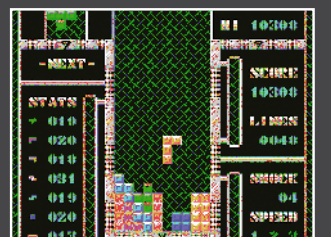
Released during the 2004 edition of the MSXdev game development competition, *Kralzec 8K Tetris* is, as the name suggests, a version of Alexey Pajitnov's shape-tessellating puzzler and, along with some solid visuals and a reasonable in-game soundtrack, is a very good implementation of the legendary game.

The controls are spot-on so shapes can be forced into the well more quickly if desired or 'wiggled' for a small amount of time after touching down. There's also an indicator showing what will be dropping in next and the game keeps a running total of how many times each shape has been used.

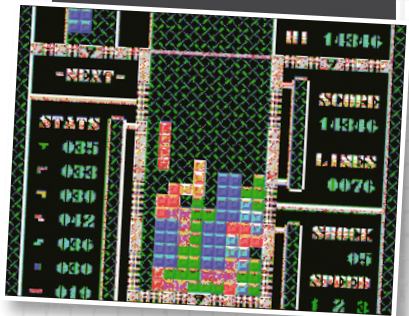
Kikstart.me.uk/msxdev-2004 has all of the MSXdev entries from the year that *Kralzec 8K Tetris* competed, including a two-player variant released around the same time called *Kralzec Battle Tetris*.



» [MSX] Building a tower of interlocked shapes even if we don't want to.



» [MSX] It's quite difficult to dislike Tetris no matter what system you're playing it on.



ZOMBIE CALAVERA PROLOGUE

» PLATFORM: VIC-20, C64 AND PLUS/4 » DEVELOPER: DIGITAL MONASTERY » DOWNLOAD: KIKSTART.ME.UK/CALAVERA-264 & KIKSTART.ME.UK/CALAVERA-C64 » PRICE: FREE

The world of graveyard worker Santos Gimenez has been turned on its head. The local occult group made the move from a minor-if-somewhat-disturbing-annoyance to stone-cold killers overnight as they headed out from their compound to burn down Santos' village and kill its occupants in order to harvest their souls. The only other survivor is our hero's wife, Maria Fernanda, who was spared because a woman with a good heart was needed to complete the ritual. She's away to the underworld, so the only option left to Santos is to pursue her kidnappers into the darkness.

Saving the world from occultists isn't going to be an easy task, any contact with one of Santos' enemies will throw him around while taking some of his precious life force away and, unless care is taken, that'll drain completely and he'll die. Santos is at least armed, so he can pump shots into patrolling creatures – although it takes a while to destroy one and doing so summons a fast-moving and even more dangerous winged spirit. Avoiding, rather than dispatching,

enemies is best unless blasting one proves to be absolutely necessary.

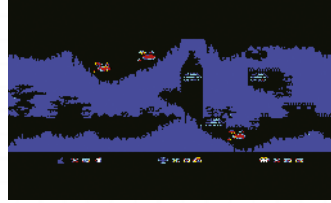
Purgatory's gateway has opened in the graveyard where our hero works, but getting in takes a lot of spiritual energy which can be gathered from the crucifixes dotted around the site. The surroundings are mostly shown in silhouette and, while that does look rather stylish, it often makes working out what's happening on the screen difficult since some landscape features are merely decorative and enemies can be concealed by them until poor Santos bumps into something nasty.

The original *Zombie Calavera Prologue* was developed by Spectrum stalwarts The Mojon Twins and these new Commodore 8-bit conversions were handled by Digital Monastery and it's nice to see the VIC-20 being included in the raft of platforms receiving a port with the Spectrum's layouts stretched by the chunkier resolution but scrolling a little to retain everything from the original.

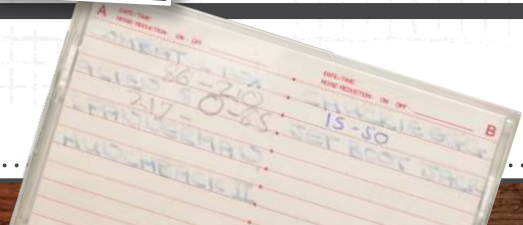
»» Score **87%**






» [C64] This demonically possessed graveyard has everything, including a lift.



» [VIC-20] A couple of throw cushions and tasteful lighting would transform this crypt.

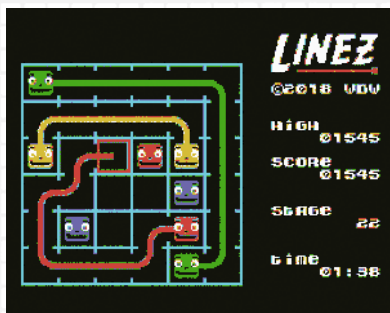


Don't forget to follow us online for all the latest retro updates

 RetroGamerUK
  @RetroGamer_Mag
  retrogamer@futurenet.com

LINEZ

» PLATFORM: MSX » PRICE: FREE
 » DEVELOPER: WIM DEWIJNGAERT
 » DOWNLOAD: KIKSTART.ME.UK/LINEZ-MSX

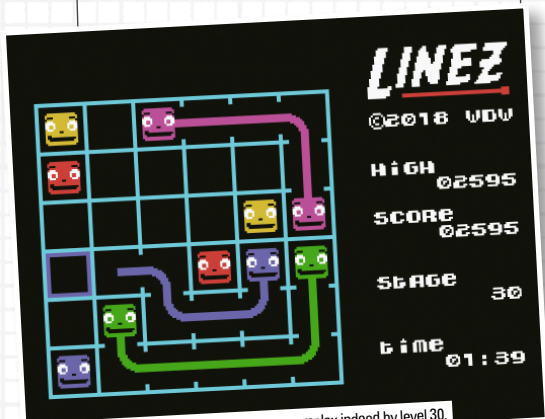


» [MSX] One more line after this and all of the faces are connected.

Linez is a puzzle game about making connections, specifically by drawing lines between coloured faces within a gridded playfield. The player selects one of the two faces they wish to join up between clicking every cell on the journey to its twin, leaving a colour-coded line as they go. The only rules that'll confound your progress are that none of the lines can cross, every cell must have a face or line, and all connections must be completed before the timer expires.

The control scheme is a little clunky – being able to click a few cells away and have it fill that gap would have been more intuitive, even if only for straight lines – but this is an engaging challenge, especially after the first dozen or so levels when it gets more devious. There was a bug on level 32 in the version we played, but that should be fixed by now.

»» Score 78%



» [MSX] The layouts are starting to get very complex indeed by level 30.

ASTRONAUT LABYRINTH

» PLATFORM: ZX SPECTRUM » DEVELOPER: JAIME GRILO
 » DOWNLOAD: KIKSTART.ME.UK/ASTRO-LABYRINTH-SPEC » PRICE: FREE

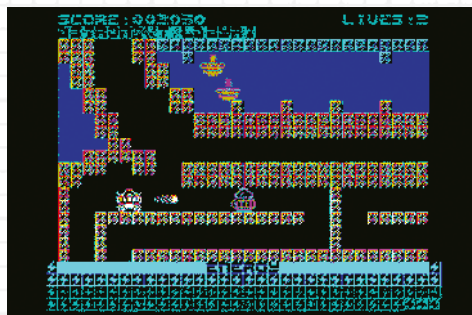
Having become lost in space, intrepid explorer Brian Bentley finds himself pulled through a portal into a labyrinth that, for reasons he may never understand, is a huge effigy of an astronaut.

Even more strangely, the only way to reverse the portal is to locate six items that are scattered around the maze which make up a picture of an astronaut, before scavenging a battery to give it a bit of juice.

The labyrinth is a series of tight and confusingly twisting corridors which are patrolled by enemies, so gathering the entire image will take some skill. Brian also needs to be patient since he can only carry one piece at a time and that, combined with the complicated nature of the map, makes *Astronaut Labyrinth* both challenging and frustrating to play. There's still lots of fun to be found while searching for items, though, so it's worth picking up.

»»

Score 72%



» [ZX Spectrum] Getting past the red patrolling nasty for that item will be tricky.

30 YEARS OF NINTENDON'T

» PLATFORM: MEGA DRIVE » DEVELOPER: DR LUDOS » DOWNLOAD: KIKSTART.ME.UK/NINTENDONT-MD » PRICE: FREE DL, ETBA CART

Travel back to 1988 and head out to spread the word about how great your newly purchased **Mega Drive** is. There's loads of NES owners around but they don't seem particularly happy right now and want new games. Each gamer will ask for something similar to what they've enjoyed playing previously when accosted and, if they hear a suggestion they like, will change allegiances. Getting someone on your side earns some extra time – failing sees them leave with a SNES – and the game is over when there's none left.

So yes, this is a silly game inspired by Sega's early 'Genesis Does What Nintendon't' advertising campaign but that doesn't stop it offering bursts of entertainment. The little NES, Mega Drive and SNES owners all look adorable – the player gets to be Sonic – and it'll take some quick thinking to increase Sega's market share before the clock expires.

»»

Score 80%



» [Mega Drive] Think quick: which of these is a replacement for Kirby?



ROUNDUP

It's labelled as version 0.9 right now, but *Omega Blast* is a new scrolling shoot-'em-up for the **Mega Drive** and the preview release looks spectacular! It's a time-limited score attack game so the player is given two minutes to rack up as many points as possible. Kikstart.me.uk/omega-blast-prv-md goes to the developer's website, and the download is near the bottom of the page.

Over on the Amiga there's a far simpler but still enjoyable game. *Dino Run* is based on the hidden error screen game from Google's Chrome browser where the player controls a dinosaur as it runs along through a monochromatic scrolling landscape, making it jump and duck around the various hazards. Kikstart.me.uk/dino-run-amiga has download links for a floppy image or files for your hard disk.



HOW TO

QUICK GUIDES TO HELP YOU GET THE BEST FROM YOUR GAMES

HOW TO...

STREAM YOUR RETRO CONSOLES

DIFFICULTY
●●○○○
LOW-MEDIUM



Fancy sharing your gaming sessions with the watching world?
Here's how to get yourself up and running

WHAT YOU'LL NEED

- » COMPUTER
- » VIDEO CAPTURE DEVICE
- » INTERNET CONNECTION
- » AV SPLITTERS (OPTIONAL)

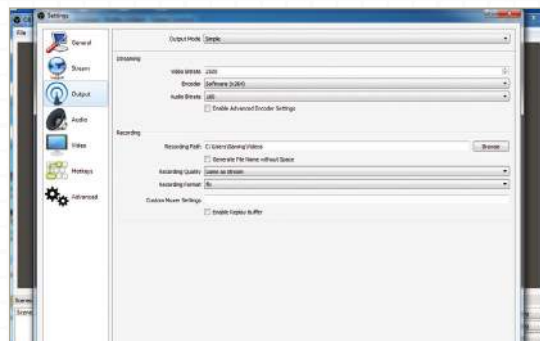
DON'T FORGET...

- » Many retro consoles output non-standard signals – take special care to check reviews before choosing a video capture device.
- » The better the video quality you put out, the better your upload speed needs to be. Check yours before you start.



01 Choose a video capture device. These are available as both internal PCI-E cards and external USB boxes. Most modern ones only accept HDMI, and accept resolutions up to 4K at 60 frames per second. This is more than enough for retro gaming, but consider your needs if you're also planning to stream from modern systems. Some old ones offer legacy inputs.

02 If your capture device doesn't support old-style outputs, you'll need a way to convert video to HDMI. We use the Open Source Scan Converter, but be warned – not all capture devices play well with it. If your capture device doesn't offer signal passthrough, you'll also need a splitter. Our one splits one input to two outputs. Grab a headset, too.



03 Install your hardware, then download and install OBS – it's a free and flexible streaming program. Alternatives include XSplit. Once all the software is ready, hook everything up and switch it on. In OBS, click Settings. Set your bitrate and encoding software under Output, and your resolution and framerate under Video.



04 Click the + symbol under Sources and add your video capture device. You should see your console's output in the preview window. Then do the same to add your audio sources (typically the game audio and a microphone), then use the mixer panel to balance the sound. You can also add images to theme your channel if you'd like.

Something you'd like to see a guide for? Contact us at:

f RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

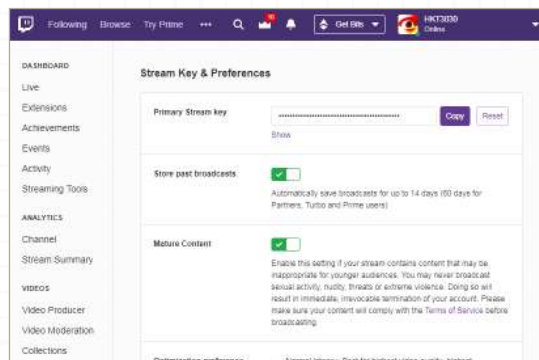
WHAT'S NEXT?

Q: My stream is working, but it's choppy – how can I make it better?

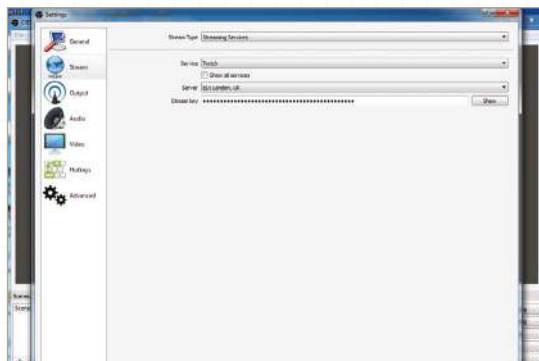
A: The likelihood is that you've got your video quality settings too high, and either your internet connection or your CPU is struggling to cope. You might also want to try lowering your bit rate, framerate or output resolution. You can also change your encoding speed – faster speeds are less CPU-intensive, but give lower output quality.

Q: Are there any compatibility problems I should be wary of?

A: Indeed. We picked up an older USB box supporting composite, S-video and component, and it didn't play nice with low-res 240p signals. If you're also planning on streaming newer consoles, some use HDCP to protect the HDMI signal (the PS3 does this). Capture cards typically won't accept HDCP-protected signals, so you'll need to disable that if you can.



05 Although there are a variety of popular streaming sites, including YouTube Gaming and Mixer, we'd recommend starting off with Twitch as it has a big audience and is compatible with most streaming software. Go to your Dashboard, and under Settings – Channel you'll find your primary stream key. Copy this.



06 Back in OBS Studio, click Settings. Under Stream, select Twitch as your service and use a nearby server, then paste your stream key into the box provided. Click OK to save your settings. You should now be ready to test your stream, so click Start Streaming and use another device to see if things are going smoothly.

YOUR QUESTIONS ANSWERED...

A selection of smaller questions from readers

SNESPLOSION

Can cartridges like SD2SNES damage a console because they run on different voltages than authentic carts?

Flavio Of Rage 4 via Twitter

Yes, it's possible. The reason for this is that some modern cartridges use 3.3V chips, but the systems are designed for 5V chips. As long as proper level translators are present, this isn't a problem – but many designs don't include them. René Richard of DB Electronics put up a good overview on this subject in 2017, which you can read at bit.ly/cartvoltage. The SD2SNES met his approval on this subject, though – he rated its electronic design 'pure gold' so that may ease your fears.

IMPORT WOES

Can all TVs play US-imported consoles? The picture on my Samsung TV is messed up when I try to play USA games on my N64 Everdrive.

Mike J Fitzgerald via Twitter

No – believe it or not, in this age of globalisation we

still run across the odd TV compatibility problem.

BLOW RASPBERRIES

How do I get that mate of mine to stop banging on about his Raspberry Pi?

Aaron Clement via Facebook

You could purchase a more powerful single-board computer such as the Odroid XU4, although this might start an escalating tech war. Alternatively, you could choose to reject emulation entirely, showing off a haul of original hardware with resale value significantly greater than that of a Ras Pi filled with ROMs you got from some dodgy site. You could also just avoid having mates. Nick finds that being single is a good way of not making friends, as partners are often irritatingly willing to introduce you to their own friends. Additionally, he suggests living alone, as this enables him to go entire weekends without having any conversations at all. However, you may feel this is rather too drastic.



» To be fair to Aaron's friend, you can do some pretty nifty stuff with a Raspberry Pi. This setup has been made to fit inside a Duke controller.

COLLECTOR'S CORNER

READERS TAKE US THROUGH THE RETRO KEYHOLE

METAL GEAR SOLID LIMITED EDITION LONGBOX

"A special box that was only released in Germany. The cover looks amazing and inside there are two sealed black label *Metal Gear Solid* games, the original and *Special Missions*."

PAID: £800



FINAL FANTASY VII

"One of my favourite games, and the first one of my sealed collection. Today it's one of the most valuable sealed games."

PAID: €600

BIO

NAME:
Kevin Arnold

LOCATION:
Leipzig, Germany

ESTIMATED COST:
€15,000

FAVOURITE CONSOLE:
PlayStation

FAVOURITE GAME:
Final Fantasy VII

SEAL OF APPROVAL

Kevin Arnold likes to collect cellophane-clad classics

With the prices for most retro games increasing all the time, it's clear that deep pockets are required for the majority of collectors. And for the divisive sub-market of sealed games, deeper, wider and altogether more voluminous pockets are a must. This month's collector, hailing from Leipzig, Germany, is one of those mysterious fans of cellophane wrappers although, like all of us, he began as a gamer. "I got my first PlayStation at Christmas when I was 14 years old," begins Kevin, "and I still have it, together with all my games from then – all unsealed of course!"

The young man was instantly taken in by the Sony console, its breadth of genres and innovative graphics, and he's a huge fan of all the big names that took starring roles back in the Nineties, from *Resident Evil* to *Final Fantasy* and *Tomb Raider*.

Kevin began collecting PlayStation games in general eight years ago, before shifting his focus to sealed games two years later. "Due to family and my job in the military, I had no time to play my old games anymore," he laments. "But I still had such a strong connection to the era and the games, so I decided to collect my favourite games for nostalgic reasons." When he first spotted a sealed PlayStation game, Kevin was taken by how fresh and new it looked. "I was instantly transported back to the PlayStation shelf in Media Markt [a big electronic store in Germany] holding a new game 20 years ago." But it's an expensive extension to an already-expensive hobby, and with time taking its toll on sealed games, it's only going to get harder to track

down your targets. "It depends on what you are looking for," notes Kevin. "Some games with high circulation, like *Tomb Raider III*, are still easy to find in sealed condition, and you can get a copy for around €50. Others, such as the original black label *Tomb Raider*, are already more difficult to find. If one existed, a collector would pay more than €1,000 for sure."

Kevin is very proud of his *Resident Evil*, *Mega Man* and *Final Fantasy* sealed sets, and is looking to complete his *Crash Bandicoot* collection and find a sealed copy of *Diablo*. It's a big ask, but not one he's given up on, despite the opprobrium that sealed game collecting attracts. "People's argument is that the games were meant for playing, and I can understand that it looks strange. But for me, my collection is like a little nostalgic museum to remember the good old days, and I have my former used games to play anyway." Finally, given the high prices sealed games command, Kevin is cautious when making purchases. "You

CRASH BANDICOOT COLLECTION

"I have a special connection to my *Crash Bandicoot* games because my first PlayStation game was *Crash Team Racing* which me and my friends had a lot of fun with."

PAID: €2,500



Got an impressive collection of your own? Contact us at:

f RetroGamerUK @RetroGamer_Mag ✉ retrogamer@futurenet.com

MEGA MAN GAMES

"Mega Man IV is the special one. I got it from a collector in Switzerland, and because of the long distance decided to spend the weekend there!"

PAID: €1,000



JEWEL IN THE CROWN

RESIDENT EVIL

■ "The first *Resident Evil* game, and one of the most successful games of the PlayStation era. I got it on an eBay auction from a Japanese collector and due to the time difference had to wake up in the middle of the night. But it was definitely worth it."

PAID: €500

have to be very careful due to reseals," he observes. "Some people remove the cellophane from low-budget games and put them over rare used games and sell them as new and sealed. You have to check the cellophane carefully. It's a hard, intense and expensive hunt – but I like the challenge!" ★

BARGAIN HUNT

Your guide to the rising world of retro prices

COVER STAR SONIC ADVENTURE

This outing for the famous blue hedgehog is one of the more common Dreamcast games, and as such remains reasonably priced with eBay Buy It Nows asking anywhere between **£10 and £20** depending on condition, and if you wish to avoid the notorious broken boxes that plague the system's games.



JUNGLE STRIKE

The sequel to *Desert Strike* sold a bucketload on the Mega Drive 25 years ago, keeping the game common and low-priced, with even boxed and complete copies normally for around **£10**. Other versions vary, with a boxed edition of the SNES port going for double that at least, on par with the Amiga CD32 disc release.

SPACE STATION SILICON VALLEY

Boxed copies of this Nintendo 64 game can generally be obtained between **£20 and £40** depending on condition, with cart-only prices hovering around **£10**. It's a similar pattern for the Game Boy Color release.



BLADE RUNNER

Even a mint boxed copy is unlikely to set your bank balance back more than **£30**. It's well worth investigating.



MEGA MAN II

Not the most expensive NES cart, but not exactly the cheapest, either. The first *Mega Man* sequel clocks in around **£10-20** for the loose cartridge, and up to **£40** for mint boxed copy.

HOW MUCH?! MEGA MAN X2

Talking of *Mega Man*, a boxed copy of this SNES game sold recently on an eBay auction for an eye-watering **£720** – plus £3.35 postage. The condition of the box looked average at best, so we're bemused as to why such a high price was commanded in this instance. September 2018 also saw just the manual for this game fetch **over £100**. It would appear that *Mega Man* plus SNES still equals mega money.



Prices correct at time of print

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – WWW.RETROGAMER.NET

WIN!

Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books



TEAM PLAYS

MR DRILLER



Can you dig it? This was the question posed to the RG team for its latest score challenge. Let's see who ate dirt the most...

DREW 4,060ft

My strategy for this challenge was to go super-fast and try and trigger a triple heart attack in my competitors. Winner by default would still be a winner. Alas, I failed. They still live.



NICK 3,855ft

I'm probably the most cautious player in the office – I spend a lot of time creating overhangs and eliminating garbage to keep me safe from falling blocks. As a result, my biggest enemy as time goes on is the air gauge.



DARRAN 3,370ft

At one point I was leading the competition and then Drew came along and ruined everything. To be fair, I'm simply amazed I managed to do as well as I did.



SAM 3,205ft

I found some success by copying the strategies of Nick, our resident puzzle master. As such I suffered the same fate, suffocating little Susumu of air.



STICK IT TO THE MAN

Hi,
First off, great mag. I particularly like the interviews with the coding heroes of the 8-bit home computer era.

I'm 40 years old. I'm guessing most of your readership is roughly around the same age. Ergo, I do not need any SNK stickers, or indeed any stickers at all and in fact I have not used stickers for fun since the 1990 World Cup Panini album. Indeed, buying a magazine with stickers in it at my age can leave me open to mockery from an unsympathetic partner who delights in ridiculing me with comments like "we can stick

them on your pencil case" and "you'll be the coolest guy in class".

Thanks a bunch, **Retro Gamer**.
Paul Taylor

Hi Paul, sorry to hear that you've been so cruelly mocked for our choice of gift! Hopefully the supplement with the extra interview content went some way to ameliorating the suffering, and last issue's calendar didn't invite more ridicule. We'll be honest and say that we weren't sure on the stickers initially – it's only been just over a year that we've been adding extras to the magazine, so we're still trying things out. As it turns out, they proved popular with the Mega Drive special in issue 182 so we did them again for the SNK anniversary.

FUTURE FOCUSED

Dear **RG**
Great magazine, thank you so much for feeding this retro gamer's mind every month and I have to say that despite all your columns and sections within each issue's publication, the

first page to which I turn is the Next Month one at the back! For some reason, it fills me with the same delight and anticipation I felt as a child when the next edition of *Crash* or *Amstrad Action* or *Amiga Format* arrived on the shelves of my local newsagent. It is bliss to know that **Retro Gamer's** Loads will appear metronomically each month, and I thank you and salute you all for keeping alive a part of my childhood that would otherwise remain dormant and moribund!

Please, never stop delivering the next Load!
Rick Adams

D'aww, thanks Rick. It's funny, we used to joke about the accuracy of our Next Month page because we'd have to change plans so often. Turns out our crystal ball was malfunctioning, so we sent it to an amazing fortune teller (his predictions are 30% accurate!) and he fixed it. It's nice to know that you anticipate each issue, and we often find ourselves excited too – not because we're super keen



» Darran is also over 40, but quite likes the stickers – as well as outdated Imagine-era name badges.

STAR LETTER

CREAM OF THE CROP

Hi **RG**,
Reading your reviews of the Neo-Geo Mini and *SNK 40th Anniversary Collection*, I couldn't help but wonder why SNK didn't just hire Digital Eclipse to handle the software side of the Neo-Geo Mini. It's amazing to me that companies can screw up their retro releases so often when they know that better options are available. The worst offender seems to be Sega – the *Sega Ages* releases on Switch are clearly superior to the recent Mega Drive compilation, which itself is better than the early *Sega Forever* mobile releases. Let's not even get started with the crimes that those AtGames plug-and-plays committed against classic games. I can only thank my lucky stars that they seem to have been dropped for the Mega Drive Mini.

There's clearly a small elite band of companies that can do justice to old games – I know about M2 and Digital Eclipse, and you guys have always praised Bluepoint Games quite highly too. So why do publishers bother to use anyone else?
Adam Walsh

We'd guess it typically comes down to budget and availability. Given the tight release timing of the Neo-Geo Mini and *SNK 40th Anniversary Collection*, it's entirely possible that Digital Eclipse wouldn't have had the staff capacity to work on both projects at once, as well as its other commitments. The *Sega Ages* games on Switch retail for £5.99 each, whereas *Sega Mega Drive Classics* is £29.99

and includes over 50 games. It's unlikely that you could give all of those games the attention that M2 does for *Sega Ages* and still hit that low price point. We're willing to pay a premium for improved quality, but will the more casual retro gamer even notice? We're not sure – it's certainly food for thought. What do you reckon, readers?



» [Switch] Digital Eclipse's work is certainly very good lately – we can't wait to see what it'll do next.



CONTACT US

Snail Mail: Retro Gamer,
Future Publishing, Richmond House,
33 Richmond Hill, Bournemouth,
Dorset, BH2 6EZ

Email: retrogamer@futurenet.com

to leave any subject behind, but because there's always something new (or old, as the case may be) on the horizon. Honestly, at one point Nick was so excited about revisiting *Sonic Adventure* that we thought we were going to have to bust out some Hannibal Lecter-style restraining equipment.

VIRTUALLY EXTINCT?

Dear retro guys

I have a question I hope you guys can answer. We have all seen the massive strides that modern tech has made towards virtual reality, but what does that mean for the common console? The current very powerful consoles, such as the PS4 and Xbox One, can do amazing things but can we push them even harder or is this the end? Will there be a PS5 or a new Xbox, or will it just be a move to VR? I hope you guys can give some info on this.

Kelvin Courtenay

We're confident in saying that the next generation of consoles will likely focus on hitting full 4K resolution for all games, to match the current TV tech. We wouldn't expect a wholesale move towards VR any time soon because the



» Hopefully we never suffer the fate of CVG – going out with a next month page for an issue that never arrives.

sales just don't justify it. That's not to say it's bad – we really like PS VR and it's easily the biggest move towards the mainstream for VR to date. But it's still a small market. By the end of summer 2018, there were 86 million PS4s sold and just 3 million PS VR headsets. That's about half the adoption rate of the Mega-CD, which most people consider to be a flop. Microsoft sold 24 million Kinects to Xbox 360 owners – about a third of the console's install base at the time – and that product line was shelved last year.

DISCUSSED THIS MONTH

The Eerie Silence

Many people have been commenting that the office feels oddly quiet this month. The reason? Noisemaker in chief Darran was out of the office for two weeks. Being trustworthy subordinates, we definitely haven't taken the opportunity to hide *Dig Dug* stuff on his desk. (But this will definitely make him search.)



» We wouldn't worry about the demise of traditional consoles, VR is a long way from replacing them.



Your say

Every month, *Retro Gamer* asks a question on the forum and prints the best replies. This month we wanted to know...

What do you think of *Sonic Adventure*?

The hawk

The 3D *Sonic* games have a pretty bad rap, largely thanks to two or three stinkers, all the other games tend to get lumped in with them. Sure, it's not aged as well as some games from its era, but I loved it at the time and there's still plenty of fun to be had with the likes of *Sonic Adventure* and its sequel.

Graeme – FossilArcade

Incredible at the time, but some risky or 'fashionable' design choices are what make it feel dated today. I used to go to Toys R Us frequently just to play the demo, it really was mind blowing back then. People shouldn't forget that, despite how it's aged.

Cameron Hons

Sonic Adventure blew me away when it first came out and still does today. Seeing *Sonic* in a proper 3D world for the first time was really mind blowing and I think the game took advantage of the adventure fields. It's a shame Sega make 3D *Sonic* games differently now.

Pierre Ant

Not a big fan. *Sonic* never managed to fit 3D in my opinion. *Generations* was okay, but I still prefer 2D episodes, like *Mania*.

Rev. Phil Richardson

Ironically I thought it was pathetic when it came out... gameplay just felt like you were either holding



» [Dreamcast] It's quite nice to see the outpouring of love for *Sonic Adventure*.

forward on the d-pad or wandering aimlessly in the adventure stages... but I've revisited and enjoyed it.

Dr. K (PhD)

I loved it (yes, even Big's stages; get over it). The game is fun, has loads of playable characters, is bright and cheerful but also dark and serious, and has loads of replay value.

Adam Barnes

Sonic Adventure was my Christmas morning and I couldn't have been happier with it. The Dreamcast was the first console that was just mine and not shared with anyone, and thought playing 3D *Sonic* was amazing. I was particularly addicted to the Chaos Egg VM thing.

retro* GAMER

Future PLC Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Editorial

Editor **Darran 'Big The Cat' Jones**
darran.jones@futurenet.com
01202 586237

Production Editor **Drew 'Knuckles' Sleep**
Senior Staff Writer **Nick 'Eggman' Thorpe**
Senior Designer **Sam 'Chaos' Ribbitt**
Brand Director, Games **Tony Mott**
Senior Art Editor **Warren Brown**
Photographer **James Sheppard**

Contributors

Luke Albigés, Hareth Al Bustani, Adam Barnes, Martyn Carroll, David Crookes, Paul Davies, Paul Drury, Andrew Fisher, Jonathan Gordon, Kieren Hawken, Jason Kelk, Graeme Mason, Rory Milne, Paul Rose, Paul Walker-Emig

Advertising

Media packs are available on request
Commercial Director **Clare Dove**
clare.dove@futurenet.com
Advertising Director **Tom Parkinson**
tom.parkinson@futurenet.com
Account Director **Kevin Stoddart**
kevin.stoddart@futurenet.com

International

Retro Gamer is available for licensing.
Contact the International department to discuss partnership opportunities.
International Licensing Director **Matt Ellis**
matt.ellis@futurenet.com

Subscriptions

Email enquiries contact@myfavouriteimagazines.co.uk
UK orderline & enquiries **0344 848 2852**
Overseas order line and enquiries **+44 (0) 344 848 2852**
Online orders & enquiries www.myfavouriteimagazines.co.uk
Magazines Marketing Director **Sharon Todd**

Circulation

Head of Newstrade **Tim Mathers**

Production

Head of Production **Mark Constance**
Production Project Manager **Clare Scott**
Advertising Production Manager **Joanne Crosby**
Digital Editions Controller **Jason Hudson**
Production Controller **Vivienne Hulston**

Management

Chief Content Officer **Aaron Asadi**
Commercial Finance Director **Dan Jotcham**
Head of Art & Design **Rodney Dive**

Printed by

Wyndham Bicester, Gravville Way, Bicester, OX26 4QZ

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU www.marketforce.co.uk Tel: 0203 787 9060

ISSN 1742-3155

We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards. The manufacturing paper mill holds full FSC (Forest Stewardship Council) certification and accreditation.

All contents © 2018 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced in any way without the prior written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury, Bath BA1 1UA. All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any other changes or updates to them. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.

If you submit material to us, you warrant that you own the material and/or have the necessary rights/permissions to supply the material and you automatically grant Future and its licensees a licence to publish your submission in whole or in part in any/all issues and/or editions of publications, in any format published worldwide and on associated websites, social media channels and associated products. Any material you submit is sent at your own risk and, although every care is taken, neither Future nor its employees, agents, subcontractors or licensees shall be liable for loss or damage. We assume all unsolicited material is for publication unless otherwise stated, and reserve the right to edit, amend, adapt all submissions.



Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR) www.futureplc.com
Chief executive **Zillah Byng-Thorne**
Non-executive chairman **Richard Huntingford**
Chief financial officer **Penny Ladkin-Brand**
Tel +44 (0)1225 442 244

FOR PEOPLE WHO ♥ RETRO GAMES

SIGN UP TO THE

retro* GAMER

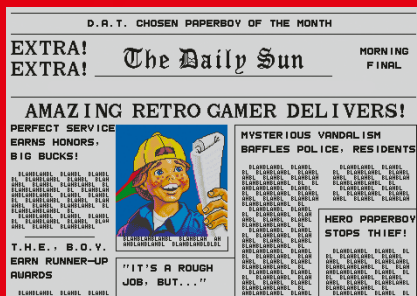


NEWSLETTER **TODAY!**



OUT
EVERY
FRIDAY

RECEIVE ALL THIS AND MORE:



ALL THE LATEST
RETRO NEWS



INTERACT WITH THE
RETRO GAMER TEAM



FANTASTIC NEW
SUBSCRIPTION **OFFERS**

SIGN UP NOW!

www.bit.ly/retronewsletter

>>LOAD 190

nextmonth

ON SALE 24 JANUARY 2019

VIGILANTE

We take to the mean streets of the Eighties in Irem's unofficial Kung-Fu Master sequel

ALSO INSIDE...

A Dog's Life, Devil Dice, Galaxy Force, Fast Food, Ruff 'N' Tumble, Divine Divinity, Operation Wolf, Resident Evil 2, Tony Takoushi and more

ENDGAME



PSYCHIC FORCE 2: REGINA'S ENDING

» Taito's odd floaty projectile-flinging combat game has a bit more plot than the average fighting game of the day, and some neat illustrations to go with it. So let's follow Regina, whose supports her brother and Neo NOA in their ambition to create a utopian world for the psychics alone. However, to do so she'll have to fight Anti-NOA and the megalomaniacal ambitions of Wong's army. Let's see how she does...

01



Regina: "Carlo, I've avenged you, my dear brother..."

» Regina's brother Carlo perished in a battle with Gudeath, leading to a fight in which both combatants laid their lives on the line. After a tough battle, the younger Belfrond defeated her brother's killer, achieving the vengeance she sought.

02



Carlo."

» Regina can now properly mourn her brother, and exhausted both physically and emotionally, she can only utter his name. Carlo was not only a member of her family, he was a figure of worship – and now he's gone.

03



Regina: "Aagh!"

» But Gudeath isn't gone. Though defeated and on the verge of death, Wong's henchman has just enough strength to aim a final blast of energy at his adversary. He won't survive this encounter, but he won't be the sole loser.

04



Gudeath: "Hah! Now you can live happily together with your brother in the afterworld..."

» Gudeath taunts Regina one final time, noting the siblings' shared fate. In seeking to advance the ambitions of the few psychics at the expense of regular humans, both have perished. Of course, in seeking absolute power for his leader, Gudeath has also fallen. Such divisive causes can only bring misery.

05



Regina: "I'll be together with you forever... Carlo..."

» Ultimately, nobody's fight mattered at all. None of them have achieved their aims, and all of them have lost their lives in the process. The values they shunned in life have caught up with them in death, as they will all rot together in absolute equality. What a futile waste.

www.retrosix.co.uk



REDUCED
SIZE



COLOR
SCREEN



MORE
POWER



Why not get
the original and best

GAME BOY ADVANCE

for the modern retro gamer?



THE SUCCESSOR TO THE GAMEBOY COLOR

THE 2001 RELEASE OF THE GBA

Hand-restored to its original condition, with the circuit board restored, a new shell, buttons and glass screen. Boxed in an awesome RetroSix box, making the perfect gift for a die-hard gamer.

Only

£59.99 at www.retrosix.co.uk

Tax included





CHILLOUT GAMES

where gamers collect
www.chilloutgames.co.uk/Sell



Get New Yr £££ For Games:



£21.17



£50.11



£16.06



£55.93



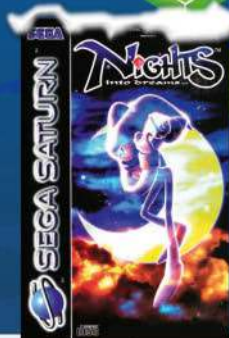
£16.19



£18.63



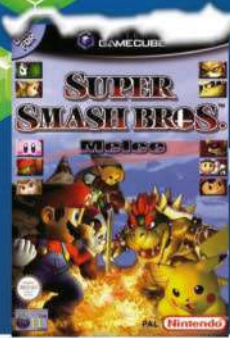
£38.07



£19.38



£16.19



£19.93



£11.41

- GET CHRISTMAS PRICES
- INCLUDES FREE COURIER AND FAST PAYMENT

Prices valid as at 25th December 2018. Prices subject to change on a daily basis. Chillout Games and retro-games.co.uk are trading names of Chillout Games Ltd. Prices are for shop credit - 12% more than PayPal. T&Cs at www.chilloutgames.co.uk.

